

## **Chapter 20.200 Shoreline Master Program**

Sections:

[20.200.010 Title.](#)

[20.200.020 Authority.](#)

[20.200.025 Liberal construction.](#)

### Subchapter 1. Goals and Objectives

[20.200.030 Purpose.](#)

[20.200.040 Shoreline elements.](#)

### Subchapter 2. General Provisions

[20.200.050 Purpose.](#)

[20.200.060 Administrator.](#)

[20.200.070 Applicability.](#)

[20.200.080 Master Program review and update.](#)

[20.200.090 Amendments to Master Program.](#)

#### **20.200.010 Title.**

This division shall be known as the City's Shoreline Master Program, hereafter referred to as the Master Program. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.200.020 Authority.**

The Master Program is adopted in accordance with Washington State's Shoreline Management Act, Chapter 90.58 RCW, hereinafter referred to as the SMA, and the master program guidelines adopted by the State in Chapter 173-26 WAC.

Where these regulations require that public access be provided, the requirement shall be construed to be limited to the extent of the lawful and constitutional authority of the City of Shoreline (hereinafter referred to as the City) to require public access or to require the easement, fee ownership or interest requested. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.200.025 Liberal construction.**

As provided in the SMA, this Master Program shall be liberally construed to give full effect to the purposes, goals, objectives, and policies for which the SMA and this Master Program were enacted. (Ord. 856 § 2 (Exh. A), 2019).

### **Subchapter 1.**

#### **Goals and Objectives**

##### **20.200.030 Purpose.**

The purpose of this Master Program is to:

- Promote the public health, safety, and general welfare of the community;
- Manage shorelines in a positive, effective, and equitable manner;
- Achieve no net loss to the ecological functions of the City's shorelines;
- Assume and carry out the responsibilities established by the SMA;
- Adopt and foster the policies contained in the SMA, for shorelines of the State; and
- Assure that proposed regulatory or administrative actions do not unconstitutionally infringe upon private property rights. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

##### **20.200.040 Shoreline elements.**

The following elements have been considered in the preparation of this Master Program for the City. The goals and objectives established for these elements provide the basis for policies and regulations included under the general use requirements of this Master Program.

#### **ECONOMIC DEVELOPMENT ELEMENT**

- Goal** Provide for economically productive uses that are particularly dependent on their shoreline location or use.
- Objective** Plan for economic activity that is water dependent, water related, or that provides an opportunity for a substantial number of people to enjoy the shoreline and water.

#### **PUBLIC ACCESS ELEMENT**

- Goal** Increase public access to publicly owned areas of the shoreline.
- Objective** Provide for public access to publicly owned shoreline areas, except where deemed inappropriate

due to safety hazards, inherent security problems, environmental impacts, or conflicts with adjacent uses.

#### RECREATIONAL ELEMENT

- Goal** Develop public and private recreation opportunities that are compatible with adjacent uses and that protect the shoreline environments.
- Objective** Provide for the preservation and enlargement of public and private recreational opportunities and recreational facilities along the shoreline, including but not limited to parks and recreational areas, wherever appropriate.

#### CIRCULATION ELEMENT

- Goal** Provide interconnected, efficient, and safe transportation networks to and around the shoreline to accommodate vehicles, transit, pedestrians, and cyclists.
- Objective** Provide for a safe and adequate circulation system, including existing and proposed major thoroughfares, transportation routes, terminals, and other public utilities and facilities within the shoreline jurisdiction that benefit permitted uses without degrading the environment or aesthetic values of the area.

#### SHORELINE USE ELEMENT

- Goal** Regulate land use patterns to locate activity and development in areas of the shoreline that will be compatible with adjacent uses and will be sensitive to existing shoreline environments, habitat, and ecological systems.
- Objective** Include protections for the natural environment and adjacent uses in this title, Point Wells Subarea Plan, Saltwater Park master planning efforts, and other regulatory framework for development along the shoreline.

#### CONSERVATION ELEMENT

- Goal** Conserve and protect the natural resources of the shoreline including, but not limited to, scenic vistas, aesthetics, and vital estuarine areas for fisheries and wildlife protection.
- Objective** Through the use of best available science, develop and implement siting criteria, design standards, and best management practices that promote the long-term enhancement of unique shoreline features, natural resources, and fish and wildlife habitat.

#### HISTORICAL, CULTURAL, SCIENTIFIC, AND EDUCATIONAL ELEMENT

- Goal** Identify, preserve, protect, and restore shoreline areas, buildings, and sites having historical,

cultural, educational, or scientific values.

**Objective** Educate citizens on historical, cultural, and scientific significance of shoreline structures, amenities, and functions.

#### FLOOD HAZARD MANAGEMENT

**Goal** Protect the City and other property owners from losses and damage created by flooding along the coast and sea-level rise.

**Objective** Seek regional solutions to flooding problems through coordinated planning with State and Federal agencies, other appropriate interests, and the public.

**Objective** Develop a plan to mitigate and adapt to potentially altered environmental conditions along the coastline resulting from climate change.

#### RESTORATION ELEMENT

**Goal** Improve water quality; reduce the impacts of flooding events; and restore natural areas, vegetation, and habitat functions.

**Objective** Seek funding for restoration projects within the shoreline jurisdiction and require development proposals to address habitat restoration and water quality.

**Objective** Engage in discussions with other municipalities that border the Puget Sound and BNSF railroad regarding efforts to benefit fish passage and nutrient transfer.

(Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

### Subchapter 2.

#### General Provisions

##### **20.200.050 Purpose.**

This chapter defines requirements for implementation of the Master Program and sets an orderly process for project review and permitting. The development regulations in the Master Program are intended to make shoreline development responsive to specific design needs and opportunities along the City's shorelines, and to protect the public's interest in the shorelines' recreational and aesthetic values. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

##### **20.200.060 Administrator.**

The Planning and Community Development Director or designee is the Shoreline Administrator, hereinafter known as the Director, and is vested with authority to:

- Administer the Master Program;
- Approve, approve with conditions, or deny shoreline substantial development permits;
- Grant exemptions from shoreline substantial development permits;
- Determine compliance with Chapter 43.21C RCW, the State Environmental Policy Act (SEPA);
- Adopt rules that are necessary and appropriate to carry out the provisions of this chapter.

The Director's duties and responsibilities include:

- Making administrative decisions and interpretations of the policies and regulations of this program and the SMA;
- Developing and proposing amendments to this Master Program to more effectively and equitably achieve its goals and policies;
- Seeking remedies for violations of this Master Program, the provisions of the SMA, or the conditions of substantial development permits issued by the City; and
- Forwarding shoreline permits to Washington State Department of Ecology for its approval or disapproval. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.200.070 Applicability.**

A. The regulations of this title apply to all areas within the shoreline jurisdiction, including shorelines of the State, shorelines of statewide significance, their associated wetlands within the City, and to the waters and underlying land of the Puget Sound extending to the middle of Puget Sound adjacent to Kitsap County, between the northern and southern limits of the City, and to shorelands that are 200 feet landward of the ordinary high water mark (OHWM).

B. These regulations provide a preference for permit issuance for measures to protect single-family residences occupied prior to January 1, 1992. Nothing in this Master Program shall constitute authority for requiring or ordering the removal of any structures, improvements, docks, fills, or developments placed in navigable waters prior to December 4, 1969, and the consent and authorization of the State of Washington to the impairment of public rights of navigation, and corollary rights incidental thereto, caused by the retention and maintenance of said structures, improvements, docks, fills, or developments are hereby granted; provided, that the consent herein given shall not relate to any structures, improvements, docks, fills, or developments placed on tidelands, shorelands, or beds underlying said waters that are in trespass or in violation of State statutes.

C. Regulation of private property to implement Master Program goals, such as public access and protection of ecological functions and processes, must be consistent with all relevant constitutional and other legal limitations.

These include, but are not limited to, civil rights guaranteed by the U.S. and State constitutions; applicable Federal and State case law; and State statutes, such as RCW 34.05.328 and 43.21C.060 and Chapter 82.02 RCW, as amended from time to time.

D. All proposed uses and development, as defined in this division, occurring within the shoreline jurisdiction shall comply with this Master Program and the SMA, whether or not a shoreline permit is required for such use or development.

E. Uses and development regulated by this Master Program are subject to applicable provisions of the Shoreline Municipal Code (SMC); the City of Shoreline Comprehensive Plan; the SMA and its implementing regulations; Chapters 173-26 and 173-27 WAC; Growth Management Act; Chapter 36.70 RCW; SEPA; Chapter 43.21C RCW and its implementing regulations; Chapter 197-11 WAC; and other applicable local, State, and Federal laws, as amended from time to time. Project proponents are responsible for complying with all applicable laws prior to commencing any use, development, or activity.

F. The Master Program policies and regulations shall apply in addition to other City regulations. Where the regulations of the Master Program conflict with other regulations, the regulations that provide more shoreland and shoreline protection shall apply.

G. Nonconforming uses and improvements within the shoreline jurisdiction shall be subject to this program and SMC [20.220.150](#).

H. All critical areas that are within the shoreline jurisdiction shall be managed and regulated per this Master Program. When a critical area overlaps into the shoreline jurisdiction or is partly within and partly outside of shoreline jurisdiction, only the buffer or setback from the portion of the critical area that is outside of the shoreline jurisdiction is subject to the City's critical area regulations, Chapter 20.80 SMC. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.200.080 Master Program review and update.**

This Master Program shall be periodically reviewed and updated as provided in the SMA and the implementing regulations in Chapter 173-26 WAC, as amended from time to time, to reflect changing local circumstances, new information or improved data, and changes in State statutes and regulations. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.200.090 Amendments to Master Program.**

Amendments shall comply with the applicable procedures set forth in the SMA and the implementing regulations in Chapter 173-26 WAC, including WAC 173-26-104, Optional Joint Review Process, as amended from time to time.

No amendment shall be effective until approved by the Department of Ecology as provided in RCW 90.58.090(7), as amended from time to time. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

## Chapter 20.210 SMP Definitions

Sections:

### [20.210.010 Definitions.](#)

#### **20.210.010 Definitions.**

For the purpose of the Master Program, the following terms shall have the meaning ascribed to them below.

Terms not defined in this section shall be defined as set forth in Chapter 20.20 SMC, Chapter 90.58 RCW, WAC 173-26-020 and 173-27-030, as amended from time to time, with the definitions contained in the RCW and WAC prevailing over the SMC.

**Accretion.** May be either natural or artificial. Natural accretion is the buildup of land, solely by the action of the forces of nature, on a beach by deposition of water- or airborne material. Artificial accretion is a similar buildup of land by reason of an act of humans, such as the accretion formed by a groin, breakwater, or beach fill deposited by mechanical means.

**Activity.** An occurrence associated with a use; the use of energy toward a specific action or pursuit. Examples of shoreline activities include, but are not limited to, fishing, swimming, boating, dredging, fish spawning, or wildlife nesting.

**Adjacent Lands.** Lands adjacent to the lands within the shoreline jurisdiction.

#### **Agricultural Uses.**

A. "Agricultural activities" means agricultural uses and practices including, but not limited to: producing, breeding, or increasing agricultural products; rotating and changing agricultural crops; allowing land used for agricultural activities to lie fallow in which it is plowed and tilled but left unseeded; allowing land used for agricultural activities to lie dormant as a result of adverse agricultural market conditions; allowing land used for agricultural activities to lie dormant because the land is enrolled in a local, State, or Federal conservation program, or the land is subject to a conservation easement; conducting agricultural operations; maintaining, repairing, and replacing agricultural equipment; maintaining, repairing, and replacing agricultural facilities; provided, that the replacement facility is no closer to the shoreline than the original facility; and maintaining agricultural lands under production or cultivation;

B. "Agricultural products" includes but is not limited to horticultural, viticultural, floricultural, vegetable, fruit, berry, grain, hops, hay, straw, turf, sod, seed, and apiary products; feed or forage for livestock; Christmas trees; hybrid cottonwood and similar hardwood trees grown as crops and harvested within 20 years of planting; and livestock including both the animals themselves and animal products including but not limited to meat, upland finfish, poultry and poultry products, and dairy products;

C. "Agricultural equipment" and "agricultural facilities" include, but are not limited to:

1. The following used in agricultural operations: equipment; machinery; constructed shelters, buildings, and ponds; fences; upland finfish rearing facilities; water diversion, withdrawal, conveyance, and use equipment and facilities including but not limited to pumps, pipes, tapes, canals, ditches, and drains;
2. Corridors and facilities for transporting personnel, livestock, and equipment to, from, and within agricultural lands;
3. Farm residences and associated equipment, lands, and facilities; and
4. Roadside stands and on-farm markets for marketing fruit or vegetables; and

D. "Agricultural land" means those specific land areas on which agriculture activities are conducted as of the date of adoption of this Master Program as evidenced by aerial photography or other documentation.

**Anadromous Fish.** Fish born in fresh water, which spend most of their lives in the sea and return to fresh water to spawn. Salmon, smelt, shad, striped bass, and sturgeon are common examples.

**Aquaculture.** The culture or farming of fish, shellfish, or other aquatic plants and animals. Aquaculture does not include the harvest of wild geoduck associated with the State managed wildstock geoduck fishery and upland finfish.

**Aquaculture Activity.** Actions directly pertaining to growing, handling, or harvesting of aquaculture produce including, but not limited to, propagation, stocking, feeding, disease treatment, waste disposal, water use, development of habitat and structures. Excluded from this definition are related upland commercial or industrial uses such as wholesale and retail sales, sorting, staging, hatcheries, tank farms, and final processing and freezing.

**Associated Wetlands.** Those wetlands that are in proximity to and either influence, or are influenced by, tidal waters or a lake or stream subject to the SMA.

**Backfill.** The placement of earth material or other approved material behind a retaining wall or structure.

**Boat Launch or Ramp.** Graded slopes, slabs, pads, planks, or rails used for launching boats by means of a trailer, hand, or mechanical device.

**Breakwaters.** Structures constructed on coasts as part of coastal defense to protect an anchorage from the effects of weather and longshore drift.

**Building Setback.** The required linear distance between the structure/building and the shoreline or critical area. The building setback shall be equal to the depth of the required native vegetation conservation area.

**Bulkheads.** A vertical or nearly vertical structure placed parallel to the shoreline at or near the OHWM for the



purpose of armoring the shoreline and protecting structures from the effects of erosion caused by wind or waves. Bulkheads generally consist of concrete, timber, steel, rock, or other material resistant to erosion. Bulkheads are used to protect banks by retaining soil at the toe of the slope, or by protecting the toe of the bank from erosion and undercutting.

**Community Boat Launching Ramp.** An inclined slab, set of pads, rails, planks, or graded slope used for launching boats with trailers or by hand for use in common by shoreline residents of a certain subdivision or community within shoreline jurisdiction.

**Community Pier or Dock.** Moorage for pleasure craft and/or landing for water sports for use in common by four or more residential units of a certain subdivision or community within the shoreline jurisdiction.

**Conditional Use, Shoreline.** A use, development, or substantial development that is classified as a conditional use or is not classified within the Master Program.

**Department of Ecology or Ecology.** The State agency created under Chapter 43.21A RCW responsible for the administration of the SMA.

**Development, Shoreline.** "Development" means a use consisting of the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removal of any sand, gravel, or minerals; bulkheading; driving of piling; placing of obstructions; or any project of a permanent or temporary nature that interferes with the normal public use of the surface of the waters overlying lands subject to this chapter at any state of water level. Development does not include dismantling or removing structures if there is no other associated development or re-development.

**Dredge Spoil.** The material removed by dredging.

**Dredge Spoil Disposal.** The depositing of dredged materials on land or into water bodies for the purpose of either creating new or additional lands or for disposing of the material in an acceptable manner.

**Dredging.** The removal or displacement of earth such as gravel, sand, mud, or silt from lands covered by water. Lands covered by water include stream beds and wetlands. Dredging is normally done for specific purposes or uses such as maintaining navigation channels, constructing bridge footings, or laying submarine pipelines or cable.

**Ecological Functions or Shoreline Functions.** The work performed or the role played by the physical, chemical, and biological processes that contribute to the maintenance of the aquatic and terrestrial environments that constitute the shoreline's natural ecosystem.

**Enhancement.** Alteration of an existing resource to improve or increase its characteristics and processes without degrading other existing functions. Enhancements are to be distinguished from resource creation or restoration projects.

**Fair Market Value.** The open market bid price for conducting the work, using the equipment and facilities, and purchase of the goods, services, and materials necessary to accomplish a development. This would normally equate to the cost of hiring a contractor to undertake the development from start to finish, including the cost of labor, materials, equipment and facility usage, transportation, and contractor overhead and profit. The fair market value of the development shall include the fair market value of any donated, contributed or found labor, equipment, or materials.

**Feasible.** An action, such as a development project, mitigation, or preservation requirement, which meets all of the following conditions:

- A. The action can be accomplished with technologies and methods that have been used in the past in similar circumstances, or studies or tests have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results;
- B. The action provides a reasonable likelihood of achieving its intended purpose; and
- C. The action does not physically preclude achieving the project's primary intended legal use.

**Flood Control.** Any undertaking for the conveyance, control, and dispersal of floodwaters caused by abnormally high direct precipitation or stream overflow.

**Gabions.** Cages, cylinders, or boxes filled with soil or sand that are used in civil engineering, road building, and military applications, primarily for erosion control and building dams and retaining walls.

**Geotechnical Report or Analysis.** A scientific study or evaluation conducted by a qualified expert that includes a description of the ground and surface hydrology and geology; the affected landform and its susceptibility to mass wasting, erosion, and other geologic hazards or processes; conclusions and recommendations regarding the effect of the proposed development on geologic conditions; the adequacy of the site to be developed; the impacts of the proposed development; alternative approaches to the proposed development; and measures to mitigate potential site-specific and cumulative geological and hydrological impacts of the proposed development, including the potential adverse impacts to adjacent and down-current properties.

**Grading.** The movement or redistribution of the soil, sand, rock, gravel, sediment, or other material on a site in a manner that alters the natural contour of the land.

**Groin.** A rigid structure built out from a shore to protect the shore from erosion, to trap sand, or to direct a current for scouring a channel.

**Ground Water Recharge.** A hydrologic process where water moves downward from surface water to ground water. Recharge occurs both naturally (through the water cycle) and anthropologically (i.e., "artificial ground water recharge"), where rainwater and/or reclaimed water is routed to the subsurface.

**Hydric Soil.** Soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper soil horizon(s).

**Jetty.** Any of a variety of structures used in river, dock, and maritime works that are generally carried out in pairs from river banks, or in continuation of river channels at their outlets into deep water; or out into docks, and outside their entrances; or for forming basins along the sea-coast for ports in tideless seas.

**Joint Use.** Moorage for pleasure craft and/or landing for water sports for use in common by two or more residential units of a certain subdivision or community within the shoreline jurisdiction.

**Land Disturbing Activities.** Any activity resulting in a movement of earth; or a change in the existing soil cover, both vegetative and nonvegetative, or the existing topography excluding the addition of soil, sand, rock, gravel, sediment, earth retaining structure, or other material to an area waterward of the OHWM; in wetlands; or on shorelands in a manner that raises the elevation or creates dry land. Land disturbing activities include, but are not limited to, clearing, grading, filling, excavation, or addition of new or the replacement of impervious surface. Compaction, excluding hot asphalt mix, which is associated with stabilization of structures and road construction, shall also be considered a land disturbing activity.

**Landfilling.** The addition of soil, sand, rock, gravel, sediment, earth retaining structure, or other material to an area waterward of the OHWM, in wetlands, or on shorelands in a manner that creates dry land.

**Native Vegetation.** Vegetation comprised of plant species, other than noxious weeds, that are indigenous to the coastal region of the Pacific Northwest and which reasonably could have been expected to naturally occur on the site. Examples include trees such as madrona, Douglas fir, western hemlock, western red cedar, alder, big-leaf maple, and vine maple; shrubs such as willow, elderberry, salmonberry, and salal; and herbaceous plants such as sword fern, foam flower, and fireweed.

**Native Vegetation Conservation Area.** Vegetated area between the native vegetation setback line and the OHWM.

**Native Vegetation Setback Line.** Unless otherwise indicated within this Master Program, the line that establishes the limits of all buildings, fencing and impervious surfaces along the shoreline.

**Nonconforming Development or Nonconforming Structure.** An existing structure that was lawfully constructed at the time it was built but is no longer fully consistent with present regulations such as setbacks, buffers, area, bulk, height, or density standards due to subsequent changes to this Master Program.

**Nonconforming Lot.** An existing lot that met dimensional requirements of this Master Program at the time of its establishment but now contains less than the required width, depth, or area due to subsequent changes to this Master Program.

**Nonconforming Use.** An existing shoreline use that was lawfully established prior to the effective date of the Act, this Master Program, or amendments thereto, but which does not conform to present use regulations or standards of the program.

**Non-Water-Oriented Uses.** Those uses that are not water-dependent, water-related, or water- enjoyment.

**Normal Maintenance.** Usual acts to prevent a decline, lapse, or cessation from a lawfully established condition.

**Normal Repair.** To restore a development to a state comparable to its original condition, including but not limited to its size, shape, configuration, location and external appearance, within a reasonable period after decay or partial destruction, except where repair causes substantial adverse effects to shoreline resource or environment.

**Ordinary High Water Mark (OHWM).** OHWM on all lakes, streams, and tidal water is that mark that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition exists on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with permits issued by the City, King County, or the Department of Ecology; provided, that in any area where the OHWM cannot be found, the OHWM adjoining salt water shall be the line of mean higher high tide and the OHWM adjoining fresh water shall be the line of mean high water.

**Public Access.** Public access is the ability of the general public to reach, touch, and enjoy the water's edge, to travel on the waters of the State, and to view the water and the shoreline from adjacent locations.

**Public Boat Launching Ramp.** An inclined slab, set of pads, rails, planks, or graded slope used for launching boats with trailers or by hand for use by the general public.

**Public Pier or Dock.** Moorage for pleasure craft and/or landing for water sports for use by the general public.

**Restoration.** The reestablishment or upgrading of impaired ecological processes or functions. This may be accomplished through measures including but not limited to revegetation, removal of intrusive structures, toxic materials, or invasive or nonnative plants. Restoration does not imply a requirement for returning the area to pre-European settlement conditions.

**Revetment.** A sloped wall constructed of riprap or other suitable material placed on stream banks or other shorelines to retard bank erosion and minimize lateral stream movement. A revetment typically slopes away from the water and has a rough or jagged face. These features differentiate it from a bulkhead, which is a vertical structure. Revetments are a facing of stone, concrete, etc., built to protect a scarp, embankment, or shore structure against erosion by waves or currents. The principal features of a revetment are: (A) heavy armor layer, (B) filter layer, and (C) toe protection.

**Riparian.** The characteristic of relating to or living or located on the bank of a natural watercourse (as a river) or

sometimes of a lake or a tidewater.

**Sediment.** The fine-grained material deposited by water or wind.

**Shorelands or Shoreland Areas.** Those lands extending landward for 200 feet in all directions as measured on a horizontal plane from the OHWM; contiguous floodplain areas landward 200 feet; and all wetlands and deltas associated with the streams, lakes, and tidal waters that are subject to the provisions of this Master Program; the same to be designated as to location by the Department of Ecology.

**Shoreline Jurisdiction.** All “shorelines of the State” and “shorelands” as defined in RCW 90.58.030, as amended from time to time.

**Shoreline Management Act (SMA).** The Shoreline Management Act of 1971, as adopted in Chapter 90.58 RCW, and as amended from time to time.

**Shoreline Master Program or Master Program.** The comprehensive plan for the use of a described area, and the regulations for use of the area including maps, diagrams, charts, or other descriptive material and text, a statement of desired goals, and standards developed in accordance with the policies enunciated in RCW 90.58.020, as amended from time to time.

**Shoreline Modifications.** Those actions that modify the physical configuration or qualities of the shoreline area, usually through the construction of a physical element such as a dike, breakwater, pier, weir, dredged basin, fill, bulkhead, or other shoreline structure. They can include other actions, such as clearing, grading, or application of chemicals.

**Shoreline Municipal Code (SMC).** The municipal code of the City of Shoreline.

**Shorelines.** All of the water areas of the State, including reservoirs, and their associated shorelands, together with the lands underlying them; except (A) shorelines of statewide significance; and (B) shorelines on lakes less than 20 acres in size and wetlands associated with such small lakes.

**Shorelines of Statewide Significance.** “Shorelines of the State” that meet the criteria for “shorelines of statewide significance” contained in RCW 90.58.030(2)(f), as amended from time to time. As it applies to the City, shorelines of statewide significance include those areas of Puget Sound and adjacent salt waters between the OHWM and the line of extreme low tide.

**Shorelines of the State.** This term includes both “shorelines” and “shorelines of statewide significance.”

**Substantial Development.** Any development of which the total cost or fair market value exceeds the amount set forth by the Washington State Office of Financial Management pursuant to RCW 90.58.030(3)(e) at the time of application submittal or any development that materially interferes with the normal public use of the water or shorelines of the State.

**Washington Administrative Code (WAC).** Specifically Chapter 173-26 WAC, Master Program Guidelines, and Chapter 173-27 WAC, Permit and Enforcement, as amended from time to time.

**Water-Dependent Use.** A use or portion of a use that cannot exist in a location that is not adjacent to the water, but is dependent on the water by reason of the intrinsic nature of its operations.

**Water-Enjoyment Use.** A recreational or other use that facilitates public access to the shoreline as a primary characteristic of the use; or a use that provides for recreational use or aesthetic enjoyment of the shoreline for a substantial number of people as a general characteristic of the use and which through location, design, and operation ensures the public's ability to enjoy the physical and aesthetic qualities of the shoreline. In order to qualify as a water enjoyment use, the use must be open to the general public and the shoreline-oriented space within the project must be devoted to the specific aspects of the use that foster shoreline enjoyment.

**Water-Oriented Use.** A use that is water-dependent, water-related, or water enjoyment, or a combination of such uses.

**Water Quality.** The physical characteristics of water within shoreline jurisdiction, including water quantity, hydrological, physical, chemical, aesthetic, recreation-related, and biological characteristics.

**Water Quantity.** Refers only to development and uses regulated under this Master Program and affecting water quantity, such as impermeable surfaces and stormwater handling practices. Water quantity, for purposes of this Master Program, does not mean the withdrawal of ground water or diversion of surface water pursuant to RCW 90.03.250 through 90.03.340, as amended from time to time.

**Water-Related Use.** A use or portion of a use that is not intrinsically dependent on a waterfront location, but whose economic viability is dependent upon a waterfront location because: (A) the use has a functional requirement for a waterfront location such as the arrival or shipment of materials by water or the need for large quantities of water; or (B) the use provides a necessary service supportive of the water-dependent uses and the proximity of the use to its customers makes its services less expensive and/or more convenient.

**Wave Return.** A structure added on top of, or part of, an existing bulkhead or hard armoring that redirects wave action back waterward and helps prevent water from splashing landward, thereby protecting the armoring itself, and landward items such as natural ecology and other structures.

**Weir.** A dam in a watercourse, usually a stream or river, to raise the water level or divert its flow.

**Wetland Delineation.** A technical procedure performed by a wetland specialist pursuant to the manual adopted by the Department of Ecology pursuant to RCW 90.58.380, as amended from time to time, to determine the area of a wetland, ascertaining the wetland's classification, function, and value, and to define the boundary between a wetland and adjacent uplands.

**Wetlands.** Areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas to mitigate the conversion of wetlands. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

**Chapter 20.220  
SMP Administrative Procedures**

Sections:

Subchapter 1. Permits

[20.220.010 Permit requirements – General.](#)

[20.220.015 Developments not required to obtain shoreline permits or local reviews.](#)

[20.220.020 Substantial development permit.](#)

[20.220.030 Development exempt from substantial development permit requirement.](#)

[20.220.040 Shoreline variance.](#)

[20.220.050 Shoreline conditional use permit.](#)

Subchapter 2. SMP Permit Procedures

[20.220.060 General.](#)

[20.220.070 Application review.](#)

[20.220.080 Permit process.](#)

[20.220.090 Local appeals.](#)

[20.220.110 Appeals to State Shoreline Hearings Board.](#)

[20.220.120 Initiation of development.](#)

[20.220.130 Expiration of permits.](#)

[20.220.140 Revision to permits.](#)

[20.220.150 Nonconforming use and development.](#)

[20.220.160 Enforcement.](#)

**Subchapter 1.**

**Permits**

**20.220.010 Permit requirements – General.**



- A. Based on the provisions of this Master Program, the Director shall determine if a substantial development permit, a shoreline conditional use permit and/or a shoreline variance is required.
- B. A permit is required for substantial development as defined in SMC [20.210.010](#) and RCW 90.58.030(3)(e), as amended from time to time, within the shoreline jurisdiction.
- C. A substantial development permit is not required for exempt development. An exempt development requires a statement of exemption pursuant to SMC [20.220.030](#) and may require a shoreline variance from Master Program provisions and/or a shoreline conditional use permit.
- D. All uses and development shall be carried out in a manner consistent with the SMC and the Master Program regardless of whether a substantial development permit, statement of exemption, shoreline variance, or shoreline conditional use permit is required.
- E. When a development or use is proposed that does not comply with the bulk, dimensional and/or performance standards of this program, such development or use may only be authorized by approval of a shoreline variance, even if the development or use does not require a substantial development permit.
- F. A development or use listed as a shoreline conditional use pursuant to this chapter, or any unlisted use, must obtain a shoreline conditional use permit even if the development or use does not require a substantial development permit.
- G. Issuance of a statement of exemption, shoreline substantial development permit, shoreline variance, or shoreline conditional use permit does not constitute approval of any other City, State, or federal laws or regulations.
- H. All shoreline permits or statements of exemption issued for development or use within the shoreline jurisdiction shall include written findings prepared by the Director, documenting compliance with bulk and dimensional policies and regulations of this Master Program. The Director may attach conditions to the approval as necessary to assure consistency with the SMA and this Master Program. The conditions may include a requirement to post a performance financial guarantee assuring compliance with permit requirements, terms and conditions. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

**20.220.015 Developments not required to obtain shoreline permits or local reviews.**

Requirements to obtain a substantial development permit, conditional use permit, variance, letter of exemption, or other review to implement the SMA do not apply to the following:

- A. Remedial actions. Pursuant to RCW 90.58.355, any person conducting a remedial action at a facility pursuant to a consent decree, order, or agreed order issued pursuant to Chapter 70.105D RCW, or to the Department of Ecology when it conducts a remedial action under Chapter 70.105D RCW, as amended from time to time.

- B. Boatyard improvements to meet NPDES permit requirements. Pursuant to RCW 90.58.355, as amended from time to time, any person installing site improvements for stormwater treatment in an existing boatyard facility to meet requirements of a national pollutant discharge elimination system stormwater general permit.
- C. Washington State Department of Transportation (WSDOT) facility maintenance and safety improvements. Pursuant to RCW 90.58.356, as amended from time to time, WSDOT projects and activities meeting the conditions of RCW 90.58.356 are not required to obtain a substantial development permit, conditional use permit, variance, letter of exemption, or other local review.
- D. Projects consistent with an environmental excellence program agreement pursuant to RCW 90.58.045, as amended from time to time.
- E. Projects authorized through the Energy Facility Site Evaluation Council process, pursuant to Chapter 80.50 RCW, as amended from time to time. (Ord. 856 § 2 (Exh. A), 2019).

**20.220.020 Substantial development permit.**

- A. Substantial development shall not be undertaken by any person on the shorelines of the State without first obtaining a substantial development permit from the Director, unless the use or development is specifically identified as exempt.
- B. A substantial development permit shall only be granted by the Director when the development proposed is consistent with the policies and procedures of the SMA, the provisions of Chapter 173-27 WAC, as amended from time to time, this Master Program, and this chapter. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

**20.220.030 Development exempt from substantial development permit requirement.**

**A. Exemptions – In General.**

1. The development activities listed in RCW 90.58.030 and WAC 173-27-040, as amended from time to time, shall not require substantial development permits.
2. Exemptions are construed narrowly. Only those developments that meet the precise terms of one or more of the listed exemptions may be granted exemption from the substantial development permit process.
3. An exemption from the substantial development permit process does not constitute an exemption from compliance with the SMA; this Master Program; or any other applicable City, State, or Federal regulations.
4. If any part of a proposed development or use is not eligible for exemption, then a substantial development permit is required for the entire proposed development project.
5. The burden of proof that a development or use is exempt from the permit process is on the applicant.

**B. Letter of Exemption.**

1. The Director is hereby authorized to approve or deny requests for letters of exemption from the shoreline substantial development permit requirement for uses and developments within shorelines that are specifically listed in RCW 90.58.030 and WAC 173-27-040, as amended from time to time.
2. Before issuing a shoreline exemption, the Director shall review the Master Program to determine if the proposed development requires a shoreline variance and/or a shoreline conditional use permit.
3. The letter of exemption shall be in writing and shall indicate the specific exemption of the Master Program that is being applied to the development, and shall provide a summary of the Director's analysis of the consistency of the project with this Master Program and the SMA.
4. The Director may attach conditions to the exempted development and/or use as necessary to assure consistency of the project with the SMA and this Master Program. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

**20.220.040 Shoreline variance.**

The purpose of a variance is to grant relief to specific bulk, dimensional, or performance requirements set forth in the Master Program where there are extraordinary or unique circumstances relating to the physical character or configuration of property such that the strict implementation of the Master Program would impose unnecessary hardships on the applicant or thwart the policies set forth in RCW 90.58.020, as amended from time to time.

- A. The applicant for a shoreline variance must demonstrate that the variance meets the criteria in WAC 173-27-170, as amended from time to time. In all instances, the applicant must demonstrate that extraordinary circumstances exist and the public interest shall suffer no substantial detrimental effect.
- B. A shoreline variance should be granted in circumstances where denial of the permit would thwart the policies enumerated in RCW 90.58.020, as amended from time to time.
- C. The Director is authorized to approve a shoreline variance from the bulk, dimensional, or performance standards of this Master Program only when all of the criteria enumerated in WAC 173-27-170 are met, as amended from time to time.
- D. Prior to approval of any shoreline variance, the Director shall consider the cumulative environmental impacts of previous, existing, and possible future requests for like actions in the area. The total effects of approved shoreline variances should remain consistent with the policies of RCW 90.58.020, as amended from time to time, and this Master Program and shall not produce significant adverse effects to the shoreline ecological functions, processes, or other users.
- E. Before making a determination to approve a shoreline variance, the Director shall consider issues related to the conservation of valuable natural resources and the protection of views from public lands.

F. Shoreline variance requests based on the applicant's/proponent's desire to enhance the view from the subject development may be granted where there are no likely detrimental effects to existing or future users, views from public lands, critical areas, other features or shoreline ecological functions and/or processes, and where reasonable alternatives of equal or greater consistency with this program are not available.

G. A shoreline variance shall not be granted:

1. When it would allow a greater height or lesser shoreline setback than what is typical for the area immediately surrounding the development site.
2. When it seeks relief from the use regulations of the Master Program.

H. A variance issued per SMC 20.30.310 shall not be construed to mean approval of a shoreline variance from Master Program use regulations.

I. An issued shoreline variance does not provide relief from the variance requirements under SMC 20.30.310. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

**20.220.050 Shoreline conditional use permit.**

The purpose of a shoreline conditional use permit is to allow greater flexibility in the application of the use regulations of the Master Program in a manner consistent with the policies of RCW 90.58.020, as amended from time to time.

A. The applicant for a shoreline conditional use permit must demonstrate that all of the criteria in WAC 173-27-160 are met, as amended from time to time.

B. Shoreline conditional use permits should be granted in a circumstance where denial of the permit would result in a conflict with the policies enumerated in RCW 90.58.020, as amended from time to time.

C. The Director is authorized to issue shoreline conditional use permits only when all the criteria enumerated in WAC 173-27-160 are met, as amended from time to time.

1. In granting conditional use permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area.
2. In authorizing a shoreline conditional use, special conditions may be attached to the permit by the Director or by the Department of Ecology to minimize the effects of the proposed use. Uses that are specifically prohibited by the Master Program may not be authorized with the approval of a shoreline conditional use permit.

D. A conditional use permit shall not be issued when uses are specifically prohibited by this Master Program. Nonclassified uses or uses not set forth in the Master Program may be authorized as a conditional use provided

the applicant can demonstrate consistency with the requirements of this chapter. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

## **Subchapter 2.**

### **SMP Permit Procedures**

#### **20.220.060 General.**

- A. Permits required under this chapter shall be processed consistent with the provisions of Chapter 20.30 SMC and the criteria in this subchapter.
- B. No permit shall be approved unless the proposed development is consistent with the provisions of this Master Program, the SMA, and the rules and regulations adopted by the Department of Ecology.
- C. Applications for shoreline permits shall also demonstrate compliance with the provisions of this subchapter. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.220.070 Application review.**

- A. Applications for shoreline permits shall comply with the submittal requirements developed pursuant to SMC 20.30.100 and WAC 173-27-180, as amended from time to time, and shall provide all information the Director determines necessary for an application to be complete.
- B. **Burden of Proof.** It is the applicant's responsibility to provide proof that the proposed development is consistent with the permit criteria requirements.
- C. **Approval.** The Director may approve, or approve with conditions, any application that complies with criteria imposed by this Master Program and the SMA.
- D. **Conditions.** The Director may attach to a permit any suitable and reasonable terms or conditions necessary to ensure the purpose and objectives of this Master Program and the SMA.
- E. **Denial.** The Director may deny any application that does not comply with criteria imposed by this Master Program or the SMA.
- F. **Financial Guarantees.** The Director may require a financial guarantee to assure full compliance with the terms and conditions of any substantial development permit, shoreline variance or shoreline conditional use. The guarantee shall be in an amount to reasonably assure the City that permitted improvements will be completed within the time stipulated. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.220.080 Permit process.**

- A. **Application Submittal.** Complete applications for a substantial development permit, shoreline variance, and a shoreline conditional use permit are Type B actions. The applications will be processed pursuant to the procedures identified in this subchapter and SMC 20.30.010 through 20.30.270 and Table 20.30.050. Unless the

SMA or other applicable law provides otherwise, the target time for local review is as set forth in Chapter 20.30 SMC.

B. **Decision.** The Director shall provide notice of final decision per SMC 20.30.150. Pursuant to RCW 90.58.140(6), as amended from time to time, the Director shall send the final decision, including findings and conclusions, to the following State agencies:

1. Department of Ecology.
2. Attorney General.

C. **Department of Ecology Review of Permits.**

1. After the Director has approved a shoreline variance or shoreline conditional use permit, the Director shall file the permit with the Department of Ecology for its approval, approval with conditions, or denial.
2. The Department of Ecology will issue its decision on a shoreline variance or shoreline conditional use permit within 30 days of filing.
3. Upon receipt of the Department of Ecology's decision, the Director shall notify those interested parties having requested notification of such decision.

D. **Local Permit Filing Procedures.** After all local permit administrative appeals are complete and the permit documents are amended to incorporate any resulting changes, the City shall mail the permit using return receipt requested mail to the Department of Ecology regional office and the Office of the Attorney General. Projects that require both conditional use permits and/or variances shall be mailed simultaneously with any substantial development permits for the project.

1. The permit and documentation of the final local decision will be mailed together with the complete permit application; a findings and conclusions letter; the final decision of the City; a permit data sheet required by WAC 173-27-190, as amended from time to time; and applicable SEPA documents.
2. Consistent with RCW 90.58.140(6), as amended from time to time, the State Shorelines Hearings Board 21-day appeal period starts with the date of filing, which is defined below:
  - a. For projects that only require a substantial development permit (SDP): the date that the Department of Ecology receives the City decision.
  - b. For a conditional use permit (CUP) or variance (VAR): the date that the Department of Ecology's decision on the CUP or variance is transmitted to the applicant and the City.
  - c. For SDPs simultaneously mailed with a CUP or VAR to the Department of Ecology: the date that the Department of Ecology's decision on the CUP or variance is transmitted to the applicant and the

City. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.220.090 Local appeals.**

There are no administrative appeals for shoreline permit decisions made by the Director. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.220.110 Appeals to State Shoreline Hearings Board.**

A. Appeals of the final decision of the City with regard to shoreline management shall be governed by the provisions of RCW 90.58.180, as amended from time to time.

B. Appeals to the Shoreline Hearings Board of a decision on a shoreline substantial development permit, shoreline variance or shoreline conditional use permit may be filed by the applicant/proponent or any aggrieved party pursuant to RCW 90.58.180. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.220.120 Initiation of development.**

A. Development pursuant to a shoreline substantial development permit shall not be authorized until 21 days after the “date of filing” of the Director’s decision with the Department of Ecology;

B. Development for which a shoreline variance or shoreline conditional use is required shall not begin and shall not be authorized until 21 days after the “date of filing” of the Department of Ecology’s decision with the Director; or

C. All appeal proceedings before the State Shoreline Hearings Board have terminated. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.220.130 Expiration of permits.**

The City may specify the length of time a shoreline permit will be effective based on the specific requirements of the development proposal. If a permit does not specify an expiration date, the following requirements apply, consistent with WAC 173-27-090, as amended from time to time:

A. **Time Limit for Substantial Progress.** Construction activities shall be commenced, or, where no construction activities are involved, the use or activity must begin within two years after the effective date of the permits.

B. **Extension for Substantial Progress.** If a request for extension has been filed before the expiration date and notice of the proposed extension is given to parties of record and the Department of Ecology, the City may authorize a single extension of no more than one year based on reasonable factors, including the inability to expeditiously obtain other governmental permits that are required prior to the commencement of construction.

C. **Five-Year Permit Authorization.** Authorization to conduct development activities shall terminate five years after the effective date.

D. **Extension of Permit Authorization.** If a request for extension has been filed before the expiration date and notice of the proposed extension is given to parties of record and the Department of Ecology, the City may authorize a single extension of no more than one year based on reasonable factors. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

**20.220.140 Revision to permits.**

A. A permit revision is required whenever the applicant proposes substantive changes to the design, terms or conditions of a project from those which are approved in the permit. Changes are substantive if they materially alter the project in a manner that relates to its conformance to the terms and conditions of the permit, this Master Program or the SMA. Changes that are not substantive in effect do not require a permit revision.

B. An application for a revision to a shoreline permit shall be submitted to the Director. The application shall include detailed plans and text describing the proposed changes. The City shall review and process the request in accordance with the requirements of WAC 173-27-100, as amended from time to time. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

**20.220.150 Nonconforming use and development.**

**A. Nonconforming Structures.**

1. Structures that were legally established and are used for a conforming use, but which are nonconforming with regard to setbacks, buffers or yards, area, bulk, height, or density, may be maintained and repaired, and may be enlarged or expanded; provided, that said enlargement does not increase the extent of nonconformity by further encroaching upon or extending into areas where construction or use would not be allowed for new development or uses. Such normal appurtenances are by definition located landward of the OHWM.

2. A structure for which a shoreline variance has been issued shall be considered a legal nonconforming structure, and the requirements of this section shall apply as they apply to preexisting nonconformities.

3. A structure that is being or has been utilized for a nonconforming use may be used for a different nonconforming use only upon the approval of a shoreline conditional use permit. A shoreline conditional use permit may be approved only upon a finding that:

- a. No reasonable alternative conforming use is practical;
- b. The proposed use will be at least as consistent with the policies and provisions of the SMA and this Master Program, and as compatible with the uses in the area, as the preexisting use; and
- c. Conditions may be attached to the permit as are deemed necessary to assure compliance with the above findings, the requirements of the Master Program and the SMA, and to ensure that the use will not become a nuisance or a hazard.



4. Any structure nonconforming as to height or setback standards that becomes damaged may be repaired or reconstructed; provided, that:
  - a. The extent of the previously existing nonconformance is not increased; and
  - b. The building permit application for repair or reconstruction is submitted within 12 months of the occurrence of damage or destruction.

**B. Nonconforming Uses.**

1. Uses that were legally established and are nonconforming with regard to the use regulations of the Master Program may continue as legal nonconforming uses. Such uses shall not be enlarged or expanded, without an approved conditional use permit, except that nonconforming single-family residences that are located landward of the OHWM may be enlarged or expanded in conformance with applicable bulk and dimensional standards by the addition of space to the main structure or by the addition of normal appurtenances as defined in WAC 173-27-040(2)(g), as amended from time to time.
2. A use which is listed as a conditional use but existed prior to adoption of the Master Program or any relevant amendment, and for which a conditional use permit has not been obtained, shall be considered a nonconforming use.
3. A use which is listed as a conditional use in SMC Table 20.230.081 but existed prior to the applicability of the Master Program to the site, and for which a shoreline conditional use permit has not been obtained, shall be considered a nonconforming use.
4. If a nonconforming use is abandoned for 12 consecutive months, or for 12 months during any two-year period, the nonconforming rights shall expire and any subsequent use shall be made conforming. A use authorized pursuant to subsection (B)(1) of this section shall be considered a conforming use for purposes of this section.

**C. Nonconforming Lots.** An undeveloped lot, tract, parcel, site, or division of land located landward of the OHWM that was established in accordance with Chapter 20.30 SMC, Subchapter 7, and State subdivision requirements prior to the effective date of the SMA or the Master Program that does not conform to the present lot size standards may be developed if permitted by other land use regulations of the City, as long as such development conforms to all other requirements of this Master Program and the SMA. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

**20.220.160 Enforcement.**

- A. The Director is authorized to enforce the provisions of this chapter and any rules and regulations promulgated hereunder pursuant to the enforcement and penalty provisions of Chapter 173-27 WAC, as amended from time to time.

B. This program will be enforced by the means and procedures set forth in Chapter 20.30 SMC, Subchapter 9. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

**Chapter 20.230**  
**SMP Shoreline Policies and Regulations**

Sections:

Subchapter 1. General Policies and Regulations

[20.230.010 General.](#)

[20.230.020 Environmental.](#)

[20.230.030 Repealed.](#)

[20.230.040 Public access.](#)

Subchapter 2. Specific Shoreline Use Policies and Regulations

[20.230.070 General.](#)

[20.230.080 Shoreline environmental designations.](#)

[20.230.081 Permitted uses and modifications.](#)

[20.230.082 Native conservation area and building setbacks.](#)

[20.230.090 Boating facilities.](#)

[20.230.095 Breakwaters, jetties, groins, and weirs.](#)

[20.230.100 Nonresidential development.](#)

[20.230.110 In-stream structures.](#)

[20.230.115 Aquaculture.](#)

[20.230.120 Parking areas.](#)

[20.230.130 Recreational facilities.](#)

[20.230.140 Residential development.](#)

Subchapter 3. Shoreline Modification Policies and Regulations

[20.230.150 General.](#)

[20.230.160 Dredging and disposal of dredging spoils.](#)

[20.230.170 Piers and docks.](#)

[20.230.175 Pier and dock repair, replacement, or expansion.](#)

[20.230.180 Bulkheads.](#)

[20.230.190 Revetment.](#)

[20.230.200 Land disturbing activities.](#)

[20.230.210 Landfilling.](#)

[20.230.230 Signs.](#)

[20.230.240 Stormwater management facilities.](#)

[20.230.250 Transportation.](#)

[20.230.260 Unclassified uses and activities.](#)

[20.230.270 Utilities.](#)

### **Subchapter 1.**

#### **General Policies and Regulations**

##### **20.230.010 General.**

The general policies and regulations apply to all uses and activities that may occur within the City's shoreline jurisdiction regardless of this Master Program's environment designation. These policies and regulations provide the overall framework for the management of the shoreline. Use these general regulations in conjunction with Subchapter 2 of this chapter, Specific Shoreline Use Policies and Regulations. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

##### **20.230.020 Environmental.**

The SMA is concerned with the environmental impacts that development, use, or activity may have on the fragile shorelines of the State. Development and certain uses or activities within the regulated shoreline may degrade the shoreline and its waters, and may damage or inhibit important species and their habitat.

#### **A. General Environmental Policies and Regulations.**

##### **1. Policies.**

- a. The adverse impacts of shoreline developments and activities on the natural environment, critical

areas and habitats for proposed, threatened, and endangered species should be minimized during all phases of development (e.g., design, construction, operation, and management).

b. Shoreline developments that protect and/or contribute to the long-term restoration of habitat for proposed, threatened, and endangered species are consistent with the fundamental goals of this Master Program. Shoreline developments that propose to enhance critical areas, other natural characteristics, resources of the shoreline, and/or provide public access and recreational opportunities to the shoreline are also consistent with the fundamental goals of this Master Program, and should be encouraged.

## 2. **Regulations.**

a. All shoreline development and activity shall be located, designed, constructed, and managed in a manner that mitigates adverse impacts to the environment. When applying mitigation to avoid or minimize significant adverse effects and significant ecological impacts, the City will apply the following sequence of steps in order of priority, with subsection (A)(2)(a)(i) of this section being top priority:

- i. Avoiding the impact altogether by not taking a certain action or parts of an action;
- ii. Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts;
- iii. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- iv. Reducing or eliminating the impact over time by preservation and maintenance operations;
- v. Compensating for the impact by replacing, enhancing or providing substitute resources or environments; or
- vi. Monitoring the impact and the compensation projects (from subsection (A)(2)(a)(v) of this section) and taking appropriate corrective measures.

b. Efforts to avoid and minimize impacts must be documented in a manner acceptable to the Director prior to the approval of mitigation and/or compensation actions.

c. All shoreline development and activity shall be located, designed, constructed, and managed in a manner that assures no net loss of shoreline ecological function.

d. All shoreline development shall be located, designed, constructed, and managed to protect the functions and values of critical areas consistent with the SMP critical areas regulations contained in Chapter [20.240](#) SMC.

e. All shoreline development shall be located and designed to avoid or minimize the need for

shoreline stabilization measures and flood protection works, such as bulkheads, revetments, dikes, levees, or substantial site regrading and dredging. Where measures and works are demonstrated to be necessary, biostabilization techniques shall be the preferred design option unless demonstrated to be infeasible, or when other alternatives will have less impact on the shoreline environment.

- f. All shoreline development and activity shall be located, designed, constructed, operated, and managed to minimize interference with beneficial natural shoreline processes, such as water circulation, sand and gravel movement, erosion, and accretion to ensure no net loss of shoreline ecological function.
- g. In approving shoreline development, the Director shall ensure that the development will maintain, enhance, or restore desirable shoreline features, as well as ensure no net loss of ecological functions. To this end, the Director may adjust and/or prescribe project dimensions, location of project components on the site, intensity of use, screening, and mitigation as deemed appropriate. Mitigation shall be required of developments that would otherwise result in net loss of ecological functions.
- h. In approving shoreline development, the Director shall consider short- and long-term adverse environmental impacts. In addition, the Director shall consider the cumulative adverse impacts of the development, particularly the precedence effect of allowing one development, which could generate or attract additional development. Identified significant short-term, long-term, and cumulative adverse environmental impacts lacking appropriate mitigation shall be sufficient reason for permit denial.
- i. As a condition of approval, the Director may require periodic monitoring for up to 10 years from the date of completed development to ensure the success of required mitigation. Mitigation plans shall include at a minimum:
  - i. Inventory of the existing shoreline environment including the physical, chemical, and biological elements, and provide an assessment of each element's condition;
  - ii. A discussion of the project's impacts and their effect on the ecological functions necessary to support existing shoreline resources;
  - iii. A discussion of any Federal, State, or local special management recommendations that have been developed for wetlands, species, or habitats located on the site;
  - iv. An assessment of habitat recommendations proposed by resource agencies and their applicability to the proposal;
  - v. A discussion of measures to preserve existing habitats and opportunities to restore habitats that were degraded prior to the proposed land use activity. Mitigation plans shall include at a minimum: planting and soil specifications (in the case of mitigation planting projects), success standards, and contingency plans;

- vi. A discussion of proposed measures that mitigate the impacts of the project and establish success criteria;
  - vii. An evaluation of the anticipated effectiveness of the proposed mitigation measures;
  - viii. A discussion of proposed management practices that will protect fish and wildlife habitat after the project site has been fully developed, including proposed monitoring and maintenance programs;
  - ix. A monitoring plan, including scientific procedures to be used to establish success or failure of the project, sampling points, success criteria, and a monitoring schedule; and
  - x. Any additional information necessary to determine the impacts of a proposal and appropriate mitigation.
- j. Shoreline development shall not be permitted if it substantially degrades the natural character of the shoreline, natural resources, or public recreational use of the shoreline.
- k. Where provisions of this Master Program conflict with each other, or with other laws, ordinances or programs, the most restrictive provisions shall apply.

**B. Earth.**

**1. Policies.**

- a. Beaches are valued for recreation and may provide fish spawning substrate. Development that could disrupt these shoreforms may be allowed:
- i. When such disruption would not reduce shoreline ecological function;
  - ii. Where there is a demonstrated public benefit; and/or
  - iii. Where the Washington State Department of Fish and Wildlife (WDFW) determines there would be no significant impact to the fisheries resource.

**2. Regulations.**

- a. Developments that alter the shoreline topography may be approved if:
- i. Flood events will not increase in frequency or severity resulting from the alteration; and/or
  - ii. The alteration would not impact natural habitat forming processes and would not reduce ecological functions. Mitigation is required for projects that would reduce ecological functions to

ensure no net loss of function.

- b. The applicant shall incorporate all known, available, and reasonable methods of prevention, control, and treatment measures into stormwater pollution prevention during and post construction.
- c. All debris and other waste materials from construction shall be disposed of in such a manner as to prevent their entry into the water body.
- d. All disposal sites for soils and materials resulting from the shoreline development shall be identified and approved before permit issuance.

## **C. Water.**

### **1. Policies.**

- a. Shoreline development and activities shall result in no net loss of ecological functions.
- b. Development and regulated activities shall minimize impacts to hydrogeologic processes, surface water drainage, and ground water recharge.
- c. Measures shall be incorporated into the development, use, or activity to protect water bodies and wetlands from all sources of pollution including, but not limited to, sediment and silt, petrochemicals, and wastes and dredge spoils.
- d. Adequate provisions to prevent water runoff from contaminating surface and ground water shall be included in development design. The Director may specify the method of surface water control and maintenance programs. Surface water control must comply with the adopted stormwater manual.
- e. All measures for the treatment of surface water runoff for the purpose of maintaining and/or enhancing water quality shall be conducted on site. Off-site treatment facilities may be considered if on-site treatment is not feasible.
- f. Point and nonpoint source pollution should be managed on a basin-wide basis to protect water quality and support the efforts of shoreline property owners to maintain shoreline ecological functions.

### **2. Regulations.**

- a. Pesticides, herbicides and fertilizers that have been identified by State or Federal agencies as harmful to humans, wildlife, or fish shall not be used on City-owned property within the shoreline jurisdiction or for development or uses approved under a substantial development permit, shoreline conditional use permit, or shoreline variance, except as allowed by the Director for the following circumstances:



- i. When use of pesticides, herbicides, and fertilizers is consistent with the best management practices (BMPs) for the project or use proposed;
  - ii. When the Director determines that an emergency situation exists where there is a serious threat to public safety, health, or the environment and that an otherwise prohibited application must be used as a last resort;
  - iii. Where chemical fertilizer, herbicide, or pesticide use is necessary to protect existing natural vegetation or establish new vegetation as part of an erosion control or mitigation plan, the use of time release fertilizer and herbicides shall be preferred over liquid or concentrate application, except as used in targeted hand applications.
- b. The release of oil, chemical, or hazardous materials onto or into the water is prohibited. Equipment for the transportation, storage, handling, or application of such materials shall be maintained in a safe and leakproof condition. If there is evidence of leakage, the further use of such equipment shall be suspended until the deficiency has been satisfactorily corrected. During construction, vehicle refueling and vehicle maintenance shall occur outside of regulated shoreline areas.
- c. The bulk storage of oil, fuel, chemical, or hazardous materials, on either a temporary or a permanent basis, is prohibited, except for uses allowed by the zoning classification. For the purpose of this section, heating oil, small boat fuel, yard maintenance equipment fuel, propane, sewage sumps, and similar items common to single-family residential uses are not included in this definition.

#### **D. Plants and Animals.**

##### **1. Policies.**

- a. In general, this Master Program shall strive to protect and restore anadromous fish resources in the Puget Sound and its tributaries within the City.
- b. Shoreline development, uses, and activities shall be:
  - i. Located and conducted in a manner that minimizes impacts to existing ecological values and natural resources of the area, conserves properly functioning conditions, and ensures no net loss of shoreline ecological functions;
  - ii. Scheduled to protect biological productivity and to minimize interference with fish resources including anadromous fish migration, spawning, and rearing activity;
  - iii. Designed to avoid the removal of trees in shorelines wherever practicable, and to minimize the removal of other woody vegetation. Where riparian vegetation is removed, measures to

mitigate the loss of vegetation shall be implemented to ensure no net loss; and

iv. Designed to minimize impacts to the natural character of the shoreline as much as possible.

## 2. **Regulations.**

a. Mitigation shall be required of the applicant for the loss of fish and wildlife resources, and natural systems, including riparian vegetation, wetlands, and other environmentally critical areas. The mitigation required shall be commensurate to the value and type of resource or system impacted by development and activity in the shoreline. On-site compensatory mitigation shall be the preferred mitigation option, except where off-site mitigation can be demonstrated to be more beneficial to fish and wildlife resources, and natural systems, including riparian vegetation, wetlands, and critical areas. If on-site compensatory mitigation is not feasible or if off-site mitigation is demonstrated to be more beneficial to the shoreline environment, the applicant shall provide funding for a publicly sponsored restoration or enhancement program in the City.

b. Enhancement, restoration, and/or creation of coniferous riparian forest or forested riparian wetland shall be the preferred mitigation for impacts to riparian vegetation and wetlands when avoidance is not possible. Preference will be based on site-specific recommendation of qualified professional. Alterations to fish and wildlife habitat conservation areas should be avoided. If they cannot be avoided, mitigation is required, and a habitat management plan shall be prepared as required in SMC [20.240.274](#).

c. Habitat management plans shall be forwarded by the applicant to the appropriate State and/or Federal resource agencies for review and comment. The City will provide the applicant with a list of addressees for this purpose.

d. Based on the habitat management plan, and comments from other agencies, the Director may require mitigating measures to reduce the impacts of the proposal on the fish and wildlife habitat conservation areas. Mitigating measures may include, but are not limited to:

- i. Increased or enhanced buffers;
- ii. Setbacks for permanent and temporary structures;
- iii. Reduced project scope;
- iv. Limitations on construction hours;
- v. Limitations on hours of operation; and/or
- vi. Relocation of access.

e. Mitigation activities shall be monitored to determine effectiveness of the habitat mitigation plan. Monitoring shall be accomplished by a third party, subject to the approval by the Director, and shall have the concurrence of the U.S. Fish and Wildlife Service, NOAA Fisheries, WDFW, and, where applicable, the Department of Ecology. Monitoring shall occur for up to 10 years following implementation of the plan. Results of the monitoring shall be publicly available and reported to the U.S. Fish and Wildlife Service and National Marine Fisheries Service. Reports shall contain the following information:

- i. A list and map of parcels subject to this requirement;
  - ii. The implementation status of the habitat management plans;
  - iii. Status of the improvements (e.g., updates if success standards are being met, what types of remedial actions have been implemented); and
  - iv. Recommendations for corrective measures if necessary.
- f. If proposed mitigation is found to be inadequate, or if adequate mitigation is determined to be impossible, the application shall be denied.
- g. Timing of in-water construction, development, or activity shall be determined by WDFW.
- h. Properties that are located in the urban conservancy shoreline environment designation shall retain trees that are 12 inches or more in diameter. Trees determined by a certified arborist to be hazardous or diseased may be removed upon approval by the City. If healthy or nonhazardous trees are removed, each removed tree must be replaced with at least three six-foot-tall trees, one 18-foot-tall tree, or one 12-foot plus one six-foot-tall tree. Trees must be of the same species removed, or equivalent native tree species.

#### **E. Noise.**

##### **1. Policy.**

- a. Noise levels shall not interfere with the quiet enjoyment of the shoreline.

##### **2. Regulations.**

- a. Any noise emanating from a shoreline use or activity shall be muffled so as to not interfere with the designated use of adjoining properties. This determination shall take into consideration ambient noise levels, intermittent beat, frequency, and shrillness.
- b. Ambient noise levels shall be a factor in evaluating a shoreline permit application.

- c. Shoreline developments that would increase noise levels to the extent that the designated use of the shoreline would be disrupted shall be prohibited. Noise shall be evaluated pursuant to Chapter 9.05 SMC, Noise Control.

**F. Public Health.**

**1. Policy.**

- a. All development within the regulated shoreline shall be located, constructed, and operated so as not to be a hazard to public health and safety.

**2. Regulations.**

- a. Development shall be designed to conform to the codes and ordinances adopted by the City.

**G. Land Use.**

**1. Policy.**

- a. The size of the shoreline development and the intensity of the use shall be compatible with the surrounding environment and uses. The City may prescribe operation intensity, landscaping, and screening standards to ensure compatibility with the character and features of the surrounding area.

- b. Shoreline developments shall minimize land use conflicts to properties adjacent to, upstream, and downstream of the proposed site.

**2. Regulations.**

- a. In reviewing permit applications, the City shall consider current and potential public use of the shoreline, total water surface reduction, and restriction to navigation.

- b. Development within the designated shoreline shall comply with the development and uses standards for the underlying zoning district.

**H. Aesthetics.**

**1. Policy.**

- a. Development should be designed to minimize the negative aesthetic impact structures have on the shoreline by avoiding placement of service areas, parking lots, and/or view-blocking structures adjacent to the shoreline.

**2. Regulations.**

- a. Development shall be designed to comply with the code standards required in the underlying zoning district.
- b. If the zoning and use require landscaping, or if planting is required for mitigation by the Director, the property owner shall provide a landscape plan that provides suitable screening that does not block public views.
- c. Development on or over the water shall be constructed as far landward as possible to avoid interference with views from surrounding properties and adjoining waters.
- d. Development on the water shall be constructed of nonreflective materials that are compatible in terms of color and texture with the surrounding area.
- e. Lighting shall be properly directed and shielded to avoid impacts to fish and off-site glare.

**I. Historical/Cultural.**

**1. Policy.**

- a. Development should strive to preserve historic or culturally significant resources.

**2. Regulations.**

- a. Developments that propose to alter historic or culturally significant resources identified by the National Trust for Historic Preservation, the Washington State Department of Archaeology and Historic Preservation, the King County Historic Preservation Program, or the City of Shoreline Historic Resource Inventory, or resources that could potentially be designated as historically or culturally significant, shall follow the applicable Federal, State, County, or local review process(es).
- b. All shoreline permits issued by the City require immediate work stoppage and City notification when any item of archaeological interest is uncovered during excavation. The applicant or project owner shall notify the Washington State Department of Archaeology and Historic Preservation, affected Indian tribes, and the City.
- c. Where archaeological or historic sites have been identified, and it is determined that public access to the site will not damage or reduce the cultural value of the site, access may be required consistent with SMC [20.230.040](#). (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

**20.230.030 Environmentally sensitive areas within the shoreline.**

*Repealed by Ord. 856. (Ord. 668 § 4 (Exh. 3), 2013).*

**20.230.040 Public access.**

Public access to the shoreline is the physical ability of the general public to reach and touch the water's edge and/or the ability to have a view of the water and the shoreline from upland locations. There are a variety of types of public access, such as picnic areas, pathways and trails, promenades, bridges, street ends, ingress and egress, and parking.

**A. Public Access Policies.**

1. Public access provisions should be incorporated into all private and public developments. Exceptions may be considered for the following types of uses:
  - a. A single-family residence;
  - b. An individual multifamily structure containing four or less dwelling units; and/or
  - c. Where deemed inappropriate by the Director.
2. Development uses and activities on or near the shoreline should not impair or detract from the public's visual or physical access to the water.
3. Public access to the shoreline should be sensitive to the unique characteristics of the shoreline and should preserve the natural character and quality of the environment and adjacent wetlands; public access should assure no net loss of ecological functions.
4. Where appropriate, water-oriented public access should be provided as close as possible to the water's edge without adversely affecting a sensitive environment.
5. Except for access to the water, the preferred location for placement of public access trails is as close to the furthest landward edge of the native vegetation zone as practical. Public access facilities should provide auxiliary facilities, such as parking and sanitation, when appropriate, and shall be designed for accessibility by people with disabilities. Publicly owned shorelines should be limited to water-dependent or public recreation uses; otherwise such shorelines should remain protected open space.
6. Public access afforded by public right-of-way street ends adjacent to the shoreline should be preserved, maintained, and enhanced.
7. Public access should be designed to provide for public safety and to minimize potential impacts to private property and individual privacy. This may include providing a physical separation to reinforce the distinction between public and private space, providing adequate space, through screening with landscape planting or fences, or other means.
8. Public views from the shoreline upland areas should be enhanced and preserved. Enhancement of views should not be construed to mean excess removal of vegetation that partially impairs views.

9. Public access facilities should be constructed of environmentally friendly materials and support healthy natural processes, whenever financially feasible and possible.

10. Public access facilities should be maintained to provide a clean, safe experience, and to protect the environment.

**B. Public Access Regulations.**

1. Public access shall be required for all shoreline development and uses, except for a single-family residence or residential projects containing four or less dwelling units.

2. Requirement of public access to shorelines does not confer the right to enter upon or cross private property, except for dedicated and marked public easements.

3. A shoreline development or use that does not provide public access may be authorized provided the applicant demonstrates and the Director determines that one or more of the following provisions apply:

- a. Unavoidable health or safety hazards to the public exist that cannot be prevented by any feasible means;
- b. Security requirements cannot be satisfied through the application of alternative design features or other solutions;
- c. The cost of providing the access, easement, or an alternative amenity is unreasonably disproportionate to the total long-term cost of the proposed development;
- d. Unacceptable environmental harm, such as damage to fish spawning areas, will result from the public access that cannot be mitigated; and/or
- e. Significant conflict between the proposed access and adjacent uses would occur and cannot be mitigated.

4. The applicant must also demonstrate that all reasonable means to public access have been exhausted, including but not limited to:

- a. Regulating access by such means as limiting use to daylight hours;
- b. Designing separation of uses and activities with such means as fences, terracing, hedges, or landscaping; and/or
- c. Providing access that is physically separated from the proposal, such as a nearby street end, an off-site viewpoint, or a trail system.

5. Public access sites shall be made barrier free for people with disabilities.
6. Public access sites shall be connected directly to the nearest public street.
7. Required public access sites shall be fully developed and available for public use at the time of occupancy or use of the development or activity.
8. Public access easements and permit conditions shall be recorded on the deed where applicable or on the face of a plat or short plat as a condition running with the land. Said recording with the King County Recorder's office shall occur at the time of permit approval.
9. The standard Washington State approved logo and other approved signs that indicate the public's right of access and hours of access shall be constructed, installed, and maintained by the applicant in conspicuous locations at public access sites. Signs controlling or restricting public access may be approved as a condition of permit approval.
10. Development on or over the water shall be constructed as far landward as possible to avoid interference with views from surrounding properties to the shoreline and adjoining waters.
11. Physical public access shall be designed to prevent significant impacts to natural systems by employing low impact development techniques. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

## **Subchapter 2.**

### **Specific Shoreline Use Policies and Regulations**

#### **20.230.070 General.**

Specific shoreline use provisions are more detailed than those listed in general policies and regulations. These use policies and regulations apply to the identified use categories and provide a greater level of detail for uses and their impacts. The policies establish the shoreline management principles that apply to each use category and serve as a bridge between the various elements listed in SMC [20.200.040](#) and the use regulations that follow.

This subchapter also includes those activities that modify the configuration or qualities of the shoreline area. Shoreline modification activities are, by definition, undertaken in support of or in preparation for a permitted shoreline use. Typically, shoreline modification activities relate to construction of a physical element such as a breakwater, dredged basins, landfilling, etc., but they can include other actions such as clearing, grading, application of chemicals, etc.

Shoreline modification policies and regulations are intended to prevent, reduce, and mitigate the negative environmental impacts of proposed shoreline modifications consistent with the goals of the SMA. A proposed



development must meet all of the regulations for both applicable uses and activities as well as the general and environment designation regulations.

The following policies and regulations apply to specific types of development that may be proposed in the shoreline jurisdiction of the City. A proposal can consist of more than one type of development. In addition, all specific shoreline development must be consistent with the following shoreline environmental designations; the goals and objectives of Chapter [20.200](#) SMC; the general policies and regulations contained in Chapter [20.230](#) SMC, Subchapter 1; and the critical areas regulations contained in Chapter [20.240](#) SMC. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.230.080 Shoreline environmental designations.**

**Aquatic Environment (A).** Encompasses all submerged lands from OHWM to the middle of Puget Sound. The purpose of this designation is to protect, restore, and manage the unique characteristics and resources of the areas waterward of the OHWM. New over-water structures are allowed only for water-dependent uses, public access, or ecological restoration and must be limited to the minimum necessary to support the structure's intended use.

**Urban Conservancy Environment (UC).** The purpose of this designation is to protect and restore relatively undeveloped or unaltered shorelines to maintain open space, floodplains, or habitat, while allowing a variety of compatible uses. This designation shall apply to shorelines that retain important ecological functions, even if partially altered. These shorelines are suitable for low intensity development, uses that are a combination of water-related or water-enjoyment uses, or uses that allow substantial numbers of people access to the shoreline. Any undesignated shorelines are automatically assigned an urban conservancy designation.

**Shoreline Residential Environment (SR).** The purpose of this designation is to accommodate residential development and accessory structures that are consistent with this Master Program. This designation shall apply to shorelines that do not meet the criteria for urban conservancy and that are characterized by single-family or multifamily residential development or are planned and platted for residential development.

**Waterfront Residential Environment (WR).** The purpose of this designation is to distinguish between residential portions of the coastline where natural and artificially-created features preclude building within the shoreline jurisdiction and the section along 27th Avenue NW where residential properties directly abut the Puget Sound.

Characteristics of 27th Avenue NW include:

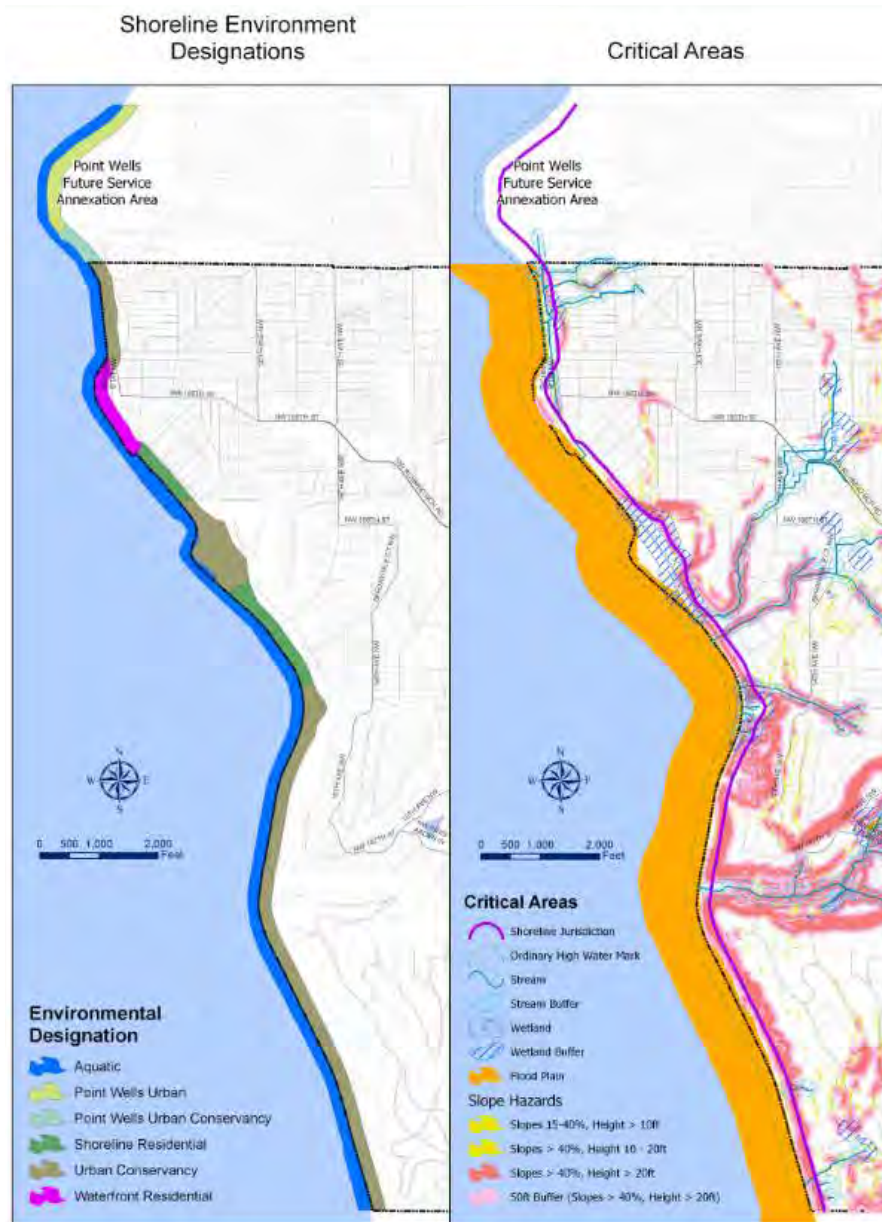
- Only fully established residential property in the City directly abutting the Puget Sound;
- Substantial number of legally existing nonconforming lots and nonconforming structures;
- Exposure to high energy wind and wave action;

- Fully armored shoreline prior to December 4, 1969, and residences occupied prior to January 1, 1992; and
- Failure of an individual bulkhead would cause adverse effect on subject property as well as neighboring properties.

These unique circumstances and considerations warrant different regulations for 27th Avenue NW as compared to existing residential property that is cut off from the shoreline by bluffs and railroad tracks (UC and SR), and potential new residential properties in the Point Wells designations (PW and PWC).

**Point Wells Urban Environment (PW).** The purpose of this designation is to accommodate higher density uses while protecting existing ecological functions and restoring ecological functions that have been degraded.

**Point Wells Urban Conservancy Environment (PWC).** The purpose of this designation is to distinguish between differing levels of potential and existing ecological function within the Point Wells environment, and regulate uses and public access requirements appropriately.



**Figure 20.230.080: Shoreline Environmental Designations and mapped critical areas.**

(Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.230.081 Permitted uses and modifications.**

Uses that are allowed in SMC Title 20, Division I, Tables 20.40.120 through 20.40.160 are permitted uses in accordance with the underlying zone, this chapter, and the provisions of this Master Program.

**P** = Permitted. Permitted uses may require shoreline substantial development permits and any other permits required by the Shoreline Municipal Code and/or other regulatory agencies.

**C** = Conditional Use. Conditional uses require shoreline conditional use permit and may require other permits

required by the Shoreline Municipal Code and/or other regulatory agencies.

**X** = Prohibited.

**Table 20.230.081 Permitted Uses and Modifications within the Shorelines**

	<i>Shoreline Environments</i>					
<b>Shoreline Use</b>	<b>Aquatic</b>	<b>Urban Conservancy</b>	<b>Shoreline Residential</b>	<b>Waterfront Residential</b>	<b>PW Urban Conservancy</b>	<b>PW Urban</b>
Agriculture	X	X	X	X	X	X
Aquaculture	C	X	X	X	X	X
Boating Facilities (Boat Hoists and Launching Ramps)	P <sup>1</sup>	P: Boat launching ramps open to the public	P: Joint use boat launching ramps	P: Joint use boat launching ramps	X	P: Boat launching ramps open to the public
Nonresidential Development	X	X	X	X	P	P
Forest Practices	X	X	X	X	X	X
Industrial Development	X	X	X	X	P: Existing	P: Existing C: Expansion
In-Stream Structures	P <sup>1</sup>	P: Part of a fish habitat enhancement or a watershed restoration project	P: Part of a fish habitat enhancement or a watershed restoration project	P: Part of a fish habitat enhancement or a watershed restoration project	P: Part of a fish habitat enhancement or a watershed restoration project	P: Part of a fish habitat enhancement or a watershed restoration project
Mining	X	X	X	X	X	X
Mooring	P	X	X	X	X	X
Recreation Use (Water-related)	C: Water-dependent only	P	P	P	P: Limit to low intensity uses, passive uses	P
Recreation Facilities	C <sup>9</sup>	P	P	P	P: Limit to low intensity uses, passive uses	P

Residential Developments	X	P	P	P	P	P
Signs	X <sup>6</sup>	P	P	P	P	P
Permanent Solid Waste Storage or Transfer Facilities	X	X	X	X	X	X
Transportation Facilities (Roads and Bridges)	X	C	P	P	C	P
Transportation Facilities <sup>2</sup> (Railroads)	P	P	P	P	P	P
Utilities	C	P: Underground facilities C: Aboveground facilities	P: Underground facilities C: Aboveground facilities	P: Underground facilities C: Above-ground facilities	P: Underground facilities C: Above-ground facilities	P: Underground facilities C: Above-ground facilities
Unclassified Uses	C	C	C	C	C	C

**Table 20.230.081 Permitted Uses and Modifications within the Shorelines**

<b>Shoreline Modifications</b>	<b>Aquatic</b>	<b>Urban Conservancy</b>	<b>Shoreline Residential</b>	<b>Waterfront Residential</b>	<b>PW Urban Conservancy</b>	<b>PW Urban</b>
Breakwaters, Jetties, Groins, and Weirs	C <sup>1</sup>	X	X	X	X	X
Dredging	P <sup>4</sup> C: Related to navigation for PWU	P <sup>4</sup>	P <sup>4</sup>	P <sup>4</sup>	P <sup>4</sup>	P <sup>4</sup>
Dredging Material Disposal	C	P <sup>5</sup>	P <sup>5</sup>	P <sup>5</sup>	P <sup>5</sup>	P <sup>5</sup>
Dune Modification	X	X	X	X	X	X
Piers and Docks	P <sup>1</sup>	P: Public	P: Joint use	P: Joint use	X	P: Existing associated with public use

						P: Public piers or docks C: Expansion of existing with water oriented industrial use
Structural Flood Hazard Reduction (Dikes and Levees)	X	X	X	X	X	X
Soft-Shore Stabilization	P <sup>1</sup>	P	P	P	P: With utilities	P
Repair, Replacement, and Maintenance of Existing Hard-Shore Armoring	P	P	P	P <sup>8</sup>	P	P
Hard Shoreline Armoring where None Previously Existed	X	C	C	C	X	C
Land Disturbing Activities	X	P <sup>3</sup>	P <sup>3</sup>	P <sup>3</sup>	P <sup>3</sup>	P <sup>3</sup>
Landfilling	C <sup>4</sup>	C <sup>3</sup>	C <sup>1</sup>	C <sup>1</sup>	C <sup>3</sup>	C <sup>3</sup>
Shoreline Habitat and Natural Systems Enhancement Projects	P	P	P	P	P	P
Marinas	X	X	X	X	X	X

<sup>1</sup> Subject to the use limitations and permit requirements of the abutting upland shoreline environment designation.

<sup>2</sup> The City recognizes the Federal preemption for local permitting per the ICC Termination Act of 1995, 49 U.S.C. § 10501(b); however, for the purposes of coastal zone management consistency the railroad company would be required to comply with the policies of this master program.

<sup>3</sup> For activities associated with shoreline restoration or remediation; or limited if associated with public access improvement and allowed shoreline development.

- <sup>4</sup> For activities associated with shoreline or aquatic restoration or remediation.
- <sup>5</sup> For shoreline habitat and natural systems enhancement, fish habitat enhancement, or watershed restoration project.
- <sup>6</sup> Signs required by regulatory agencies for navigational operation, safety and direction purposes allowed in aquatic environment per SMC [20.230.230](#)(B)(1).
- <sup>7</sup> Limited to water-dependent, public access, or shoreline stabilization activities.
- <sup>8</sup> This includes replacement.
- <sup>9</sup> Refer to SMC [20.230.130](#) for conditions.

(Ord. 856 § 2 (Exh. A), 2019).

#### **20.230.082 Native conservation area and building setbacks.**

The term “native conservation area” (NVCA) applies to areas where the shoreline is not armored, such as the PWC environment designation, and Richmond Beach Saltwater Park. NVCAs should be maintained in a predominantly natural, undisturbed, undeveloped, and vegetated condition, except where necessary to accommodate appurtenances to a permitted water-dependent use. The term “building setback” applies in areas where the railroad or bulkheads prohibit natural sediment transfer. In those areas, it is necessary to maintain hard-armored conditions, but further encroachment or vegetative clearing is not permitted. The area is measured horizontally from the OHWM and the structure or use.

**Table 20.230.082 Native Conservation Area/Building Setbacks**

<b>Shoreline Environmental Designation</b>	<b>Minimum Native Vegetation Conservation or Building Setback Area</b>
Urban Conservancy	150 feet or 50 feet from the top of a landslide hazard area, whichever is greater
Shoreline Residential	115 feet
Waterfront Residential	20 feet
Point Wells Urban	200 feet (restoration required as part of development)

Point Wells Urban Conservancy	200 feet
----------------------------------	----------

Bulk standards will be regulated by underlying zoning according to SMC Table 20.50.020(1). Zoning designation is R6 for UC, SR, and WR, and yet to be determined for PW and PWC.

(Ord. 856 § 2 (Exh. A), 2019).

#### **20.230.090 Boating facilities.**

Boating facilities serving two or more single-family dwelling units generally include boat launch ramps (public and private), wet and dry boat storage, and related sales and service for pleasure and commercial watercraft. For the purpose of this section, boat hoists, davits, lifts, and/or dry boat storage of private watercraft consistent with single-family residential properties are not included.

##### **A. Boating Facilities Policies.**

1. Boating facilities can have a significant impact on habitat. The impacts of boating facilities should be reviewed thoroughly before boating facilities are permitted in the shoreline jurisdiction.
2. Public and community boating facilities may be allowed. Individual private facilities are prohibited.
3. New nonresidential boating facilities may be allowed as a conditional use within the regulated shoreline. When allowed, such facilities should be designed to accommodate public access and enjoyment of the shoreline location. Depending on the scale of the facility, public access should include walkways, viewpoints, restroom facilities, and other recreational uses.
4. Dry boat storage should not be considered a water-oriented use. Only boat hoists, boat launch ramps, and access routes associated with a dry boat storage facility should be considered a water-oriented use.
5. Health, safety and welfare considerations must be addressed in application for development of boating facilities.
6. Navigation rights must be protected in development of boating facilities.
7. Extended moorage on waters of the State without a lease or permission is restricted and mitigation of impacts to navigation and access is required.

##### **B. Boating Facilities Regulations.**

1. Boating facilities may be permitted only if:
  - a. It can be demonstrated that the facility will not adversely impact fish or wildlife habitat areas or associated wetlands; and



- b. Adequate mitigation measures ensure that there is no net loss of the functions or values of the shoreline and habitat as a result of the facility.
2. Boating facilities shall not be permitted within the following marine shoreline habitats because of their scarcity, biological productivity and sensitivity unless no alternative location is feasible, the project would result in a net enhancement of shoreline ecological functions, and the proposal is otherwise consistent with this program:
  - a. Critical saltwater habitats; and
  - b. Marshes, estuaries and other wetlands.
3. Preferred ramp designs, in order of priority, are:
  - a. Open grid designs with minimum coverage of beach substrate;
  - b. Seasonal ramps that can be removed and stored upland; and
  - c. Structures with segmented pads and flexible connections that leave space for natural beach substrate and can adapt to changes in beach profile.
4. Ramps shall be placed and maintained near flush with the foreshore slope.
5. Boat launches shall be designed and constructed using methods/technology that have been recognized and approved by State and Federal resource agencies as the best currently available. Rail and track systems shall be preferred over concrete ramps or similar facilities.
6. Launch access for nonmotorized watercraft shall use gravel or other permeable material. Removal of vegetation for launch access should be limited to eight feet in width.
7. Before granting approval of a permit to allow a boat launch ramp, the proponent must satisfactorily demonstrate that:
  - a. Adequate facilities for the efficient handling of sewage and litter will be provided;
  - b. The boating facilities will be designed so that structures are aesthetically compatible with or enhance shoreline features and uses; and
  - c. The boating facilities will be designed so that existing or potential public access along beaches is not blocked or made unsafe, and so that public use of the surface waters is not unduly impaired.

**C. Boat Launch Ramps.**

1. Boat launch ramps shall be located on stable shorelines where water depths are adequate to eliminate or minimize the need for channel maintenance activities.
2. Boat launch ramps may be permitted on accretion shoreforms provided any necessary grading is not harmful to affected resources.
3. Where boat ramps are permitted, parking and shuttle areas shall not be located on accretion shoreforms.
4. Boat launch ramps may be permitted on stable, noneroding banks where the need for shore stabilization structures is minimized.
5. Ramp structures shall be placed near flush with the foreshore slope to minimize the interruption of geohydraulic processes.
6. Boat launch sites that are open to the public shall have adequate restroom facilities operated and maintained in compliance with King County Health District regulations.

**D. Dry Boat Storage.**

1. Dry boat storage shall not be considered a water-oriented use and must comply with the required shoreline environment setback.
2. Only water-dependent aspects of dry boat storage, such as boat hoists and boat launch ramps, may be permitted within shoreline environment setbacks.
3. Boat launch ramps associated with dry boat storage shall be consistent with applicable requirements in this section. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

**20.230.095 Breakwaters, jetties, groins, and weirs.**

**A. Breakwaters, Jetties, Groins and Weirs Policies.**

1. Breakwaters, jetties, groins, and weirs should be permitted only for water-dependent uses and only where mitigated to provide no net loss of shoreline ecological functions and processes.

**B. Breakwaters, Jetties, Groins and Weirs Regulations.**

1. Groins are prohibited except as a component of a professionally designed public beach management program that encompasses an entire drift sector or reach for which alternatives are infeasible, or where installed to protect or restore shoreline ecological functions or processes.
2. Jetties and breakwaters are prohibited except as an integral component of a professionally designed harbor or port. Where permitted, floating, portable or submerged breakwater structures, or smaller

discontinuous structures, are preferred where physical conditions make such alternatives with less impact feasible. Defense works that substantially reduce or block littoral drift and cause erosion of downdrift shores shall not be allowed unless an adequate long-term professionally engineered beach nourishment program is established and maintained. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.230.100 Nonresidential development.**

##### **A. Nonresidential Development Policies.**

1. Priority of any nonresidential development should be given to water-dependent and water- enjoyment uses. Allowed uses include restaurants that provide a view of the sound to customers, motels and hotels that provide walking areas for the public along the shoreline, office buildings, and retail sales buildings that have a waterfront theme with public access to the beach or water views.
2. Over-the-water nonresidential development shall be prohibited.
3. Nonresidential development should be required to provide on-site physical or visual access to the shoreline, or offer other opportunities for the public to enjoy shorelines of statewide significance. If on-site access cannot be provided, off-site access should be required. Off-site access could be procured through the purchase of land or an easement at a location appropriate to provide the access deemed necessary. Nonresidential developments should include multiple-use concepts such as open space and recreation.
4. Nonresidential development in the shoreline jurisdiction should include landscaping to enhance the shoreline area.

##### **B. Nonresidential Development Regulations.**

1. Over-water construction of nonresidential uses is prohibited, with the exception of boat facilities necessary for the operation of an associated nonresidential use.
2. All nonresidential development within the shoreline area shall provide for visual and/or physical access to the shoreline by the public. Where on-site public access is feasible, nonresidential development shall dedicate, improve, and provide maintenance for a pedestrian easement that provides area sufficient to ensure usable access to and along the shoreline for the general public. Public access easements shall be a minimum of 25 feet in width and shall comply with the public access standards contained in the "Public Access" section of this Master Program and this title.
3. All nonresidential loading and service areas shall be located on the upland side of the nonresidential activity or provisions shall screen the loading and service areas from the shoreline.
4. All nonresidential development within shoreline jurisdiction shall assure no net loss of shoreline ecological functions.

5. A shoreline setback is not required to be maintained for water-dependent nonresidential development.
6. Water-dependent, nonresidential development shall maintain a shoreline setback of either 25 feet from the OHWM or 10 feet from the edge of the base flood elevation, whichever is greater. If public access is provided to the shoreline, the setback may be reduced to 10 feet from the OHWM or the edge of the base flood elevation, whichever is greater.
7. Non-water-dependent nonresidential development shall maintain a minimum setback from the OHWM consistent with Table 20.230.082. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.230.110 In-stream structures.**

##### **A. In-Stream Structures Policies.**

1. In-stream structures should provide for the protection and preservation of ecosystem-wide processes, ecological functions, and cultural resources including, but not limited to, fish and fish passage, wildlife and water resources, shoreline critical areas, hydrogeological processes, and natural scenic vistas. The location and planning of in-stream structures should give due consideration to the full range of public interests, watershed functions and processes, and environmental concerns, with special emphasis on protecting and restoring priority habitats and species.
2. Nonstructural and nonregulatory methods to protect, enhance, and restore shoreline ecological functions and processes and other shoreline resources should be encouraged as an alternative to structural in-stream structures.

##### **B. In-Stream Structures Regulations.**

1. Natural in-stream features such as snags, uprooted trees, or stumps should be left in place unless it can be demonstrated that they are actually causing bank erosion or higher flood stages.
2. In-stream structures shall allow for normal ground water movement and surface runoff.
3. In-stream structures shall not impede upstream or downstream migration of anadromous fish.
4. All debris, overburden, and other waste materials from construction shall be disposed of in such a manner that prevents their entry into a water body. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.230.115 Aquaculture.**

##### **A. Aquaculture Policies.**

1. Potential locations for aquaculture are relatively restricted due to specific requirements for water quality, temperature, flows, oxygen content, adjacent land uses, wind protection, commercial navigation, and, in marine waters, salinity. The technology associated with some forms of present-day aquaculture is

still in its formative stages and experimental. Therefore, the City recognizes the necessity for some latitude in the development of this use as well as its potential impact on existing uses and natural systems.

2. Aquaculture should not be permitted in areas where it would result in a net loss of ecological functions, adversely impact eelgrass and macroalgae, or significantly conflict with navigation and other water-dependent uses. Aquacultural facilities should be designed and located so as not to spread disease to native aquatic life, establish new nonnative species which cause significant ecological impacts, or significantly impact the aesthetic qualities of the shoreline. Impacts to ecological functions shall be mitigated according to the mitigation sequence described in SMC [20.230.020](#).

#### **B. Aquaculture Regulations.**

1. Aquaculture is allowed as a conditional use in the aquatic environment where it can be located, designed, constructed, and managed to avoid a net loss of ecological functions, not spread diseases to native aquatic life, not adversely impact native eelgrasses and macroalgae species, or not significantly conflict with navigation.
2. The supporting infrastructure for aquaculture may be located landward of the aquaculture operation subject to this title.
3. Aquaculture facilities are required to develop best management practices to minimize impacts from the construction and management of the facilities.
4. New aquatic species that are not previously cultivated in Washington State shall not be introduced into Shoreline's saltwaters or freshwaters without prior written approval of the Director of WDFW and the Director of the Washington Department of Health. This prohibition does not apply to: Pacific, Olympia, Kumomoto, Belon, or Virginica oysters; Manila, Butter, or Littleneck clams; or Geoduck clams.
5. No aquacultural processing, except for the sorting or culling of the cultured organism and the washing or removal of surface materials or organisms, shall be permitted waterward of the OHWM unless fully contained within a tending boat or barge.
6. Aquaculture wastes shall be disposed of in a manner that will ensure compliance with all applicable governmental waste disposal standards, including but not limited to the Federal Clean Water Act, Section 401, and Chapter 90.48 RCW, Water Pollution Control, as amended from time to time. No garbage, wastes, or debris shall be allowed to accumulate at the site of any aquaculture operation. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.230.120 Parking areas.**

##### **A. Parking Area Policies.**

1. Parking in shoreline areas should be minimized.

2. Parking within shoreline areas should directly serve a permitted use on the property.
3. Parking in shoreline areas should be located and designed to minimize adverse impacts including those related to stormwater runoff, water quality, visual qualities, public access, and vegetation and habitat maintenance.
4. Landscaping should consist of native vegetation in order to enhance the habitat opportunities within the shorelines area.

**B. Parking Regulations.** Parking for specific land use activities within the City is subject to the requirements and standards set forth in Chapter 20.50 SMC, Subchapter 6, Parking, Access, and Circulation. In addition, the following parking requirements shall apply to all developments within shorelands:

1. The location of parking areas in or near shoreland areas shall be located outside of the minimum setbacks listed in Table 20.230.082 for the shoreline designation.
2. Parking in the shorelands must directly serve an approved shoreline use.
3. Parking shall be located on the landward side of the development unless parking is contained within a permitted structure. Where there is no available land area on the landward side of the development, parking shall extend no closer to the shoreline than a permitted structure.
4. Landscape screening is required between the parking area and all adjacent shorelines and properties as set forth in Chapter 20.50 SMC, Subchapter 7, Landscaping.
5. The landscape screening for parking areas located within the shoreline areas shall consist of native vegetation, planted prior to final approval of project, which provides effective screening two years after planting. Adequate screening or landscaping for parking lots shall consist of one or more of the following:
  - a. A strip five feet wide landscaped with trees, shrubs, and/or groundcover;
  - b. A building or enclosed structure; and/or
  - c. A strip of land not less than two and one-half feet in width that is occupied by a continuous wall, fence, plant material, or combination of both, which shall be at least three and one-half feet high at time of installation. The plant material shall be evergreen and spaced not more than one and one-half feet on center if pyramidal in shape, or not more than three feet if wider in branching habit. If the plant material is used in conjunction with a wall or fence meeting the minimum height requirements, then said material may be of any kind and spacing. More restrictive screening may be required by Chapter 20.50 SMC, Subchapters 6 and 7. Required parking area screening may be incorporated into general landscaping requirements under Chapter 20.50 SMC, Subchapters 6 and 7.

6. The requirement for screening may be waived by the Director, where screening would obstruct a significant view from public property or public roadway.
7. Parking areas shall not be permitted over the water.
8. Parking as a primary use shall be prohibited within all shoreline environments.
9. Parking or storage of recreational vehicles or travel trailers as a primary use shall be prohibited in all shoreline environments. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.230.130 Recreational facilities.**

Recreational development provides for low impact activities, such as hiking, photography, kayaking, viewing, and fishing, or more intensive uses such as parks. This section applies to both publicly and privately owned shoreline facilities.

##### **A. Recreational Facilities Policies.**

1. The coordination of local, State, and Federal recreation planning should be encouraged so as to mutually satisfy recreational needs. Shoreline recreational developments should be consistent with all adopted parks, recreation, and open space plans.
2. Parks, recreation areas, and public access points, such as hiking paths, bicycle paths, and scenic drives, should be linked.
3. Recreational developments should be located and designed to preserve, enhance, or create scenic views and vistas.
4. The use of jet-skis and similar recreational equipment should be restricted to special areas. This type of activity should be allowed only where no conflict exists with other uses and wildlife habitat.
5. All recreational developments should make adequate provisions for:
  - a. Vehicular and pedestrian access, both on site and off site;
  - b. Proper water, solid waste, and sewage disposal methods;
  - c. Security and fire protection for the use itself and for any use-related impacts to adjacent private property;
  - d. The prevention of overflow and trespass onto adjacent properties; and
  - e. Buffering of such development from adjacent private property or natural areas.

**B. Recreational Facilities Regulations.**

1. Valuable shoreline resources and fragile or unique areas, such as wetlands and accretion shoreforms, shall be used only for low impact and nonstructural recreation activities.
2. For recreation developments that require the use of fertilizers, pesticides, or other chemicals, the property owner shall submit plans demonstrating the methods to be used to prevent these chemical applications and resultant leachate from entering adjacent water bodies. The property owner shall be required to maintain a chemical-free swath at least 100 feet in depth adjacent to water bodies.
3. Recreational facilities shall make adequate provisions, such as screening, buffer strips, fences, and signs, to mitigate nuisance to nearby private properties.
4. No recreational buildings or structures shall be built waterward of the OHWM, except water-dependent and/or water-enjoyment structures such as bridges and viewing platforms. Such uses may be permitted as a shoreline conditional use.
5. Proposals for recreational development shall include adequate facilities for water supply, sewage, and garbage disposal. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

**20.230.140 Residential development.**

- A. 1. Residential development does not include hotels, motels, or any other type of overnight or transient housing or camping facilities.
2. A shoreline substantial development permit is not required for construction of a single-family residence by an owner, lessee, or contract purchaser for their own use or the use of their family. Single-family residential construction and accessory structures must otherwise conform to this Master Program.
  3. A shoreline variance or shoreline conditional use permit may be required for residential development for situations specified in this Master Program.
  4. Uses and facilities associated with residential development, which are identified as separate use activities in this Master Program, such as land disturbing activities, are subject to the regulations established for those uses in this section.

**B. Residential Policies.**

1. Public access should be provided in accordance with SMC [20.230.040](#).
2. Residential development and accessory uses should be prohibited over the water.
3. New subdivisions should be encouraged to cluster dwelling units in order to preserve natural features, minimize physical impacts, and provide for public access to the shoreline.



4. In all new subdivisions and detached single-family developments with four dwelling units, joint use shoreline facilities should be encouraged.
5. Accessory uses and structures should be designed and located to blend into the site as much as possible. Accessory uses and structures should be located landward of the principal residence when feasible.

**C. Residential Regulations.**

1. Residential development is prohibited waterward of the OHWM and within setbacks defined for each shoreline environment designation.
2. Residential development shall assure no net loss of shoreline ecological functions.
3. Residential development shall not be approved if geotechnical analysis demonstrates that flood control or shoreline protection measures are necessary to create a residential lot or site area. Residential development shall be located and designed to avoid the need for structural shore defense and flood protection works.
4. If wetlands or other critical areas are located on the development site, clustering of residential units shall be required in order to avoid impacts to these areas.
5. Storm drainage facilities shall include provisions to prevent the direct entry of uncontrolled and untreated surface water runoff into receiving waters as specified in the Stormwater Manual.
6. Subdivisions and planned unit developments of four waterfront lots/units shall dedicate, improve, and provide maintenance provisions for a pedestrian easement that provides area sufficient to ensure usable access to and along the shoreline for all residents of the development and the general public. When required, public access easements shall be a minimum of 25 feet in width and shall comply with the public access standards in SMC [20.230.040](#). The design shall conform to the standards in the Engineering Development Manual.
7. Single-family residential development shall maintain a minimum setback from the OHWM consistent with Table 20.230.082.
8. Multifamily residential development shall maintain a minimum setback from the OHWM consistent with Table 20.230.082.
9. One accessory structure to the residence may be placed within the required shoreline setback provided:
  - a. No accessory structure shall cover more than 200 square feet. (Ord. 856 § 2 (Exh. A), 2019;

amended during 10/13 supplement; Ord. 668 § 4 (Exh. 3), 2013).

### **Subchapter 3.**

#### **Shoreline Modification Policies and Regulations**

##### **20.230.150 General.**

Shoreline modification involves developments that provide bank stabilization or flood control. The purpose of the modification is to reduce adverse impacts caused by natural processes, such as current, flood, tides, wind, or wave action. Shoreline modification includes all structural and nonstructural means to reduce flooding and/or erosion of banks.

Nonstructural methods include setbacks of permanent and temporary structures, relocation of the structure to be protected, ground water management, planning, bioengineering or “soft” engineered solutions, and regulatory measures to avoid the need for structural stabilization.

“Hard” structural stabilization measures refer to those with solid, hard surfaces, such as concrete bulkheads, while “soft” structural measures rely on natural materials such as biotechnical vegetation or beach enhancement. Generally, the harder the construction measure, the greater the impact on shoreline processes, including sediment transport, geomorphology, and biological functions. New structural shoreline stabilization also often results in vegetation removal, as well as damage to nearshore habitat and shoreline corridors. There are a range of measures varying from soft to hard that include:

- Vegetation enhancement;
- Upland drainage control;
- Biotechnical measures;
- Beach enhancement;
- Anchor trees;
- Gravel placement;
- Rock revetments;
- Gabions;
- Concrete groins;

- Retaining walls and bluff walls; and/or
- Bulkheads.

**A. Shoreline Modification Policies – General.**

1. Biostabilization and other bank stabilization measures should be located, designed, and constructed primarily to prevent damage to the existing primary structure.
2. All new development should be located and designed to prevent or minimize the need for shoreline stabilization measures and flood protection works. New development requiring shoreline stabilization shall be discouraged in areas where no preexisting shoreline stabilization is present.
3. Shoreline modifications are only allowed for mitigation or enhancement purposes, or when and where there is a demonstrated necessity to support or protect an existing primary structure or legally existing shoreline use that is otherwise in danger of loss or substantial damage.
4. Proposals for shoreline modifications should be designed to protect life and property without impacting shoreline resources.
5. Shoreline modifications that are natural in appearance, compatible with ongoing shoreline processes, and provide flexibility for long-term management, such as protective berms or vegetative stabilization, should be encouraged over structural means such as concrete bulkheads or extensive revetments, where feasible.
6. Structural solutions to reduce shoreline damage should be allowed only after it is demonstrated that nonstructural solutions would not be able to withstand the erosive forces of the current and waves.
7. The design of bank stabilization or protection works should provide for the long-term, multiple use of shoreline resources and public access to public shorelines.
8. In the design of publicly financed or subsidized works, consideration should be given to providing pedestrian access to shorelines for low impact outdoor recreation.
9. All flood protection measures should be placed landward of the natural flood boundary, including wetlands that are directly interrelated and interdependent with water bodies.
10. If, through construction and/or maintenance of shoreline modification developments, the loss of vegetation and wildlife habitat will occur, mitigation should be required.
11. Existing, previously permitted stabilization measures, such as bulkheads and retaining walls, are considered engineered and abated hazards and shall not be classified as geologic hazard areas.

**B. Shoreline Modification Regulations – General.**

1. All new development, uses or activities within the shoreline area shall be located and designed to prevent or minimize the need for bank stabilization and flood protection works.
2. Permitted and shoreline conditional use requirements for bulkheads and revetments are specified in this chapter. All other forms of shoreline modification, except soft shore, must be approved as a shoreline conditional use within all shoreline environments.
3. All shoreline stabilization proposals require a geotechnical analysis.
4. All shoreline development and activity shall be located, designed, constructed, and managed in a manner that mitigates impacts to the environment. The preferred mitigation sequence (avoid, minimize, mitigate, compensate) shall follow that listed in SMC [20.230.020\(A\)](#).
5. New non-water-dependent development, including single-family residences, that includes structural shoreline stabilization shall not be allowed unless all of the conditions below apply; otherwise new stabilization measures are limited to protecting only existing developments:
  - a. The need to protect the development from destruction due to erosion caused by natural processes, such as currents and waves, is demonstrated through a geotechnical/hydrogeological report prepared by a City-approved qualified professional.
  - b. The erosion is not caused by upland conditions, such as the loss of vegetation and/or drainage issues.
  - c. There will be no net loss of shoreline ecological functions or impacts to adjacent or down-current properties.
  - d. Nonstructural measures, such as placing the development further from the shoreline, planting vegetation, or installing on-site drainage improvements and soft structural solutions such as bioengineering, are not feasible or not sufficient.
  - e. The structure will not cause adverse impacts to the functions and values of critical areas or properly functioning conditions for proposed, threatened, and endangered species.
  - f. Other mitigation/restoration measures are included in the proposal.
6. Upon project completion, all disturbed shoreline areas shall be restored to as near pre-project configuration as possible and replanted with appropriate vegetation. All losses in riparian vegetation or wildlife habitat shall be mitigated at a ratio of 1:1.25 (habitat lost to habitat replaced).
7. Shoreline stabilization and flood protection works are prohibited in wetlands and on point and channel

bars. They are also prohibited in fish spawning areas.

8. Developments shall not reduce the volume and storage capacity of streams and adjacent wetlands or flood plains.

9. Use of refuse for the stabilization of shorelines is prohibited. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.230.160 Dredging and disposal of dredging spoils.**

##### **A. Dredging and Dredge Spoil Policies.**

1. Dredging waterward of the OHWM for the primary purpose of obtaining fill material is prohibited.
2. Dredging operations should be planned and conducted to minimize interference with navigation; avoid creating adverse impacts on other shoreline uses, properties, and ecological shoreline functions and values; and avoid adverse impacts to habitat areas and fish species.
3. Dredge spoil disposal in water bodies shall be prohibited except for habitat improvement.
4. Dredge spoil disposal on land should occur in areas where environmental impacts will not be significant.

##### **B. Dredging and Dredge Spoil Regulations.**

1. Dredging and dredge spoil disposal shall be permitted only where it is demonstrated that the proposed actions will not:
  - a. Result in significant damage to water quality, fish, and other essential biological elements;
  - b. Adversely alter natural drainage and circulation patterns, currents, or reduce floodwater capacities;
  - c. Adversely impact properly functioning conditions for proposed, threatened, or endangered species; or
  - d. Adversely alter functions and values of the shoreline and associated critical areas.
2. Proposals for dredging and dredge spoil disposal shall include all feasible mitigating measures to protect habitats and to minimize adverse impacts such as turbidity; release of nutrients, heavy metals, sulfides, organic materials, or toxic substances; depletion of oxygen; disruption of food chains; loss of benthic productivity; and disturbance of fish runs and/or important localized biological communities.
3. Dredging and dredge spoil disposal shall not occur in wetlands unless for approved maintenance or

enhancement associated with a restoration project.

4. Dredging within the shorelines shall be permitted only:
  - a. For navigational purposes; or
  - b. For activities associated with shoreline or aquatic restoration or remediation.
5. When dredging is permitted, the dredging shall be the minimum necessary to accommodate the proposed use.
6. Dredging shall utilize techniques that cause minimum dispersal and broadcast of bottom material; hydraulic dredging shall be used wherever feasible in preference to agitation dredging.
7. Dredge material disposal shall be permitted in shoreline jurisdiction only as part of an approved shoreline habitat and natural systems enhancement, fish habitat enhancement or watershed restoration project.
8. Dredged spoil material may be disposed at approved upland sites. If these upland sites are dry lands and fall within shoreline jurisdiction, the disposal of dredge spoils shall be considered landfilling and must be consistent with all applicable provisions of this Master Program. Depositing dredge spoils within the Puget Sound shall be allowed only by shoreline conditional use for one of the following reasons:
  - a. For wildlife habitat improvements; or
  - b. To correct problems of material distribution that are adversely affecting fish resources.
9. If suitable alternatives for land disposal are not available or are infeasible, water disposal sites may be permitted by appropriate agencies, provided the sites are determined by the Director to be consistent with the following criteria:
  - a. Disposal will not interfere with geohydraulic processes;
  - b. The dredge spoil has been analyzed by a qualified professional and found to be minimally or nonpolluting;
  - c. Aquatic life will not be adversely affected; and
  - d. The site and method of disposal meet all requirements of applicable regulatory agencies.
10. Disposal of dredge material shall be done in accordance with the Washington State Department of Natural Resources (DNR) Dredge Material Management Program. DNR manages disposal sites through a site use authorization (SUA); all other required permits must be provided to DNR prior to the DNR issuing a

SUA for dredge disposal.

11. The City may impose reasonable limitations on dredge spoil disposal operating periods and hours, and may require buffer strips at land disposal sites. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.230.170 Piers and docks.**

Piers and docks may be allowed in accordance with Table 20.230.081 only when the following conditions are met:

- A. The public's need for piers and docks is clearly demonstrated, and the proposal is consistent with protection of the public trust, as embodied in RCW 90.58.020, as amended from time to time.
- B. Avoidance of impacts to critical saltwater habitats by an alternative alignment or location is not feasible, or would result in unreasonable and disproportionate cost to accomplish the same general purpose.
- C. The project, including any required mitigation, will result in no net loss of ecological functions associated with critical saltwater habitat.
- D. The project is consistent with the State's interest in resource protection and species recovery.
- E. Private, noncommercial docks for joint or community use may be authorized; provided, that:
  - 1. Avoidance of impacts to critical saltwater habitats by an alternative alignment or location is not feasible; and
  - 2. The project, including any required mitigation, will result in no net loss of ecological functions associated with critical saltwater habitat.
- F. An inventory of the site and adjacent beach sections to assess the presence of critical saltwater habitats and functions is required. The methods and extent of the inventory shall be consistent with accepted research methodology. Proposals will be evaluated using the Department of Ecology technical assistance materials for guidance.
- G. Community moorage to serve new development shall be limited to the amount of moorage needed to serve lots with water frontage; provided, that a limited number of upland lots may also be accommodated. Applications for shared moorage shall demonstrate that mooring buoys are not feasible prior to approval of dock moorage.
- H. Piers and docks shall be constructed of materials that will not adversely affect water quality or aquatic plants and animals over the long term. Materials used for submerged portions of a pier or dock, decking, and other components that may come in contact with water shall be approved by applicable State agencies for use in water to avoid discharge of pollutants from wave splash, rain, or runoff. At a minimum, piles, floats, or other structural members in direct contact with the water shall be constructed of concrete or steel in accordance with

best management practices (BMPs) published by WDFW and the United States Army Corps of Engineers (USACE), and they shall not be treated or coated with herbicides, fungicides, paint, or pentachlorophenol. Use of arsenate compounds or creosote is prohibited.

I. Pilings used in piers or docks shall have a minimum clearance of two feet above extreme high tide and a maximum clearance of five feet above the OHWM. Floats shall not rest on the substrate.

J. To minimize adverse effects on nearshore habitats and species caused by over-water structures that reduce ambient light levels, the following shall apply:

1. The width of docks, piers, floats, and lifts shall be the minimum necessary, and shall not be wider than six feet;
2. The length of docks and piers shall be the minimum necessary to prevent the grounding of floats and boats on the substrate during low tide;
3. Docks, floats or floating docks shall include stops that serve to keep the float bottom off tidelands at low tide;
4. The length and location of docks, piers, floats, and lifts pilings shall be designed using the BMPs as conditioned in the permitting documents approved by WDFW and USACE; and
5. The size of shared docks or piers is limited to 700 square feet for two lots and 1,000 square feet for three or more lots.

K. All new piers or docks must be fully grated. Grating to allow light passage or reflective panels to increase light refraction into the water shall be used on piers, docks, floats, and gangways in nearshore areas. Decking shall have a minimum open space of 40 percent and after installation at least 60 percent ambient light beneath the structure shall be maintained. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

**20.230.175 Pier and dock repair, replacement, or expansion.**

A. Existing over-water structures may be repaired and/or replaced in the same location as the existing structure.

B. Repair or replacement of 50 percent or more of an existing over-water deck structure shall include the replacement of the entire decking with grated material to achieve a minimum open space of 40 percent and shall result in at least 60 percent ambient light beneath the structure.

C. Repair or replacement of less than 50 percent of the over-water deck structure shall use grated decking in the area to be replaced. If the cumulative repair in any three-year period exceeds 50 percent, the entire decking shall be replaced to achieve a minimum open space of 40 percent and shall result in at least 60 percent ambient light beneath the structure.



- D. Repair or replacement of structural members in contact with the water shall be constructed of concrete or steel in accordance with BMPs published by WDFW and USACE and they shall not be treated or coated with herbicides, fungicides, paint, or pentachlorophenol. Use of arsenate compounds or creosote is prohibited.
- E. Expansion of existing over-water structures is prohibited.
- F. Other repairs not described in this section to existing legally established structures are considered minor and may be permitted consistent with all applicable regulations. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.230.180 Bulkheads.**

Bulkheads are walls usually constructed parallel to the shore, whose primary purpose is to contain and prevent the loss of soil by erosion, wave, or current action. Bulkheads are typically constructed of poured-in-place concrete; steel or aluminum sheet piling; wood; or wood and structural steel combinations.

The SMA only exempts the construction of a normal protective bulkhead associated with an existing single-family residence from the shoreline substantial development permit requirement. However, these structures are required to comply with all the policies and development standards of this Master Program.

#### **A. Bulkhead Policies.**

1. Bulkheads constructed from natural materials, such as protective berms, beach enhancement, or vegetative stabilization, are strongly preferred over structural bulkheads constructed from materials such as steel, wood, or concrete. Proposals for bulkheads should demonstrate that natural methods are unworkable.
2. Bulkheads should be located, designed, and constructed primarily to prevent damage to the existing primary structure. New development that requires bulkheads is not permitted except as specifically provided under this Master Program.
3. Shoreline uses should be located in a manner so that a bulkhead is not likely to become necessary in the future.
4. Bulkheads should not be approved as a solution to geophysical problems such as mass slope failure, sloughing, or landslides. Bulkheads should only be approved for the purposes of preventing bank erosion by the Puget Sound.

#### **B. Bulkhead Regulations.**

1. New bulkheads may be allowed only when evidence is presented to demonstrate that one of the following conditions exists:

- a. Serious erosion threatens an established use or existing primary structure on upland property;
  - b. Bulkheads are necessary to the operation and location of water-dependent, water-related, or water-enjoyment activities consistent with this Master Program; provided, that all other alternative methods of shore protection have proven infeasible; and/or
  - c. A bulkhead is necessary to retain landfilling that has been approved consistent with the provisions of this Master Program.
2. Proposals for bulkheads must first demonstrate through a geotechnical analysis that use of natural materials and processes and nonstructural or soft structural solutions to bank stabilization are not feasible.
3. The construction of a bulkhead for the primary purpose of retaining landfilling shall be allowed only in conjunction with:
  - a. A water-dependent use;
  - b. A bridge or navigational structure for which there is a demonstrated public need and where no feasible upland sites, design solutions, or routes exist; and/or
  - c. A wildlife or fish enhancement project.
4. Bulkheads shall not be located on shorelines where valuable geohydraulic or biological processes are sensitive to interference. Examples of such areas include wetlands and accretion landforms.
5. Bulkheads are to be permitted only where local physical conditions, such as foundation bearing materials, and surface and subsurface drainage, are suitable for such alterations.
6. If possible, bulkheads shall be located landward of the OHWM and generally parallel to the natural shoreline. In addition:
  - a. Where no other bulkheads are adjacent, the construction of a bulkhead shall be as close to the eroding bank as possible and in no case shall it be more than three feet from the toe of the bank;
  - b. A bulkhead for permitted landfilling shall be located at the toe of the fill; and
  - c. Where permitted, a bulkhead must tie in flush with existing bulkheads on adjoining properties; except where the adjoining bulkheads extend waterward of the base flood elevation, the requirements set forth in this section shall apply.
7. Replacement bulkheads may be located immediately waterward of the bulkhead to be replaced such that the two bulkheads will share a common surface, except where the existing bulkhead has not been backfilled or has been abandoned and is in serious disrepair. In such cases, the replacement bulkhead

shall not encroach waterward of the OHWM or existing structure unless the residence was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns.

8. All bulkhead proposals require a geotechnical report prepared by a qualified professional. Bulkheads shall be sited and designed as recommended in approved geotechnical reports. For the waterfront residential environment designation, one geotechnical report could be prepared for multiple properties.

9. When a bulkhead is required at a public access site, provision for safe access to the water shall be incorporated into bulkhead design.

10. Bulkheads shall be designed for the minimum dimensions necessary to adequately protect the development.

11. Stairs or other permitted structures may be built into a bulkhead but shall not extend waterward of the bulkhead, unless they are retractable or removable.

12. Bulkheads shall be designed to permit the passage of surface or ground water without causing ponding or saturation of retained soil/materials.

13. Adequate toe protection consisting of proper footings, a fine retention mesh, etc., shall be provided to ensure bulkhead stability without relying on additional riprap.

14. Materials used in bulkhead construction shall meet the following standards:

- a. Bulkheads shall utilize stable, nonerodible, homogeneous materials such as concrete, wood, and rock that are consistent with the preservation and protection of the ecological habitat;
- b. Dredge spoils shall not be used for fill behind bulkheads, except clean dredge spoil from a permitted off-site dredge and fill operation; and
- c. Backfill and wave returns to stabilize bulkheads are permitted. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.230.190 Revetment.**

A revetment is a sloped shoreline structure built to protect an existing eroding shoreline or newly placed fill against currents. Revetments are most commonly built of randomly placed boulders (riprap) but may also be built of sand cement bags, paving or building blocks, gabions (rock filled wire baskets), or other systems and materials. The principal features of a revetment, regardless of type, are a heavy armor layer, a filter layer, and toe protection.

#### **A. Revetment Policies.**

1. The use of armored structural revetments should be limited to situations where it is determined that

nonstructural solutions such as bioengineering, setbacks, buffers or any combination thereof, will not provide sufficient shoreline stabilization.

2. Revetments should be designed, improved, and maintained to provide public access whenever possible.

**B. Revetment Regulation.**

1. The proposed revetment shall be designed by a qualified professional engineer.
2. Design of revetments shall include and provide improved access to public shorelines whenever possible.
3. When permitted, the location and design of revetments shall be determined using engineering principles, including guidelines of the Natural Resources Conservation Service and USACE.
4. Armored revetment design shall meet the following design criteria:
  - a. The size and quantity of the material shall be limited to only that necessary to withstand the estimated energy intensity of the hydraulic system;
  - b. Filter fabric must be used to aid drainage and help prevent settling;
  - c. The toe reinforcement or protection must be adequate to prevent a collapse of the system from scouring or wave action; and
  - d. Fish habitat components, such as large boulders, logs, and stumps, shall be considered in the design subject to a hydraulic project approval by WDFW. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

**20.230.200 Land disturbing activities.**

**A. Land Disturbing Activity Policies.**

1. Land disturbing activities should only be allowed in association with a permitted shoreline development.
2. Land disturbing activities should be limited to the minimum necessary to accommodate the shoreline development or a landscape plan developed in conjunction with the shoreline development.
3. Erosion shall be prevented and sediment shall not enter waters of the State.

**B. Land Disturbing Activity Regulations.**

1. All land disturbing activities shall only be allowed in association with a permitted shoreline

development.

2. All land disturbing activities shall be limited to the minimum necessary for the intended development, including any clearing and grading approved as part of a landscape plan. Clearing invasive, nonnative shoreline vegetation listed on the King County Noxious Weed List is permitted in the shoreline area with an approved clearing and grading permit provided best management practices are used as recommended by a qualified professional, and native vegetation is promptly reestablished in the disturbed area.
3. Tree and vegetation removal shall be prohibited in required native vegetation conservation areas, except as necessary to restore, mitigate or enhance the native vegetation by approved permit as required in these areas.
4. All significant trees in the native vegetation conservation areas shall be designated as protected trees consistent with SMC 20.50.330 and removal of hazard trees must be consistent with SMC 20.50.310(A)(1).
5. All shoreline development and activities shall use measures identified in the 2014 Department of Ecology Stormwater Management Manual for Western Washington, or as revised. Stabilization of exposed surfaces subject to erosion along shorelines shall, whenever feasible, utilize soil bioengineering techniques.
6. For extensive land disturbing activities that require a permit, a plan addressing species removal, revegetation, irrigation, erosion and sedimentation control, and other methods of shoreline protection should be required. (Ord. 856 § 2 (Exh. A), 2019; Ord. 850 § 1 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.230.210 Landfilling.**

##### **A. Landfilling Policies.**

1. The perimeter of landfilling should be designed to avoid or eliminate erosion and sedimentation impacts, during both initial landfilling activities and over time.
2. Where permitted, landfilling should be the minimum necessary to provide for the proposed use and should be permitted only when conducted in conjunction with a specific development proposal that is permitted by this Master Program. Speculative landfilling activity should be prohibited.

##### **B. Landfilling Regulations.**

1. Landfilling activities shall only be permitted in conjunction with a specific development. Landfilling may be permitted as a shoreline conditional use for any of the following:
  - a. In conjunction with a water-dependent use permitted under this Master Program; and/or
  - b. In conjunction with a bridge, utility, or navigational structure for which there is a demonstrated public need and where no feasible upland sites, design solutions, or routes exist.

2. Pier or pile supports shall be utilized in preference to landfilling. Landfilling for approved road development in floodways or wetlands shall be permitted only if pile or pier supports are proven structurally infeasible.
3. Landfilling shall be permitted only where it is demonstrated that the proposed action will not:
  - a. Result in significant damage to water quality, fish, and/or wildlife habitat; or
  - b. Adversely alter natural drainage and current patterns or significantly reduce floodwater capacities.
4. Where landfilling activities are permitted, the landfilling shall be the minimum necessary to accommodate the proposed use.
5. Landfilling from dredging and dredge material disposal shall be done in a manner that avoids or minimizes significant ecological impacts. Impacts that cannot be avoided shall be mitigated in a manner that assures no net loss of shoreline ecological functions.
6. Dredging waterward of the OHWM for the primary purpose of obtaining fill material shall not be allowed, except when the material is necessary for the restoration of shoreline ecological functions. When allowed, the site where the fill is to be placed must be located waterward of the OHWM.
7. Landfilling shall be designed, constructed, and maintained to prevent, minimize, and control all material movement, erosion, and sedimentation from the affected area. Landfilling perimeters shall be designed and constructed with silt curtains, vegetation, retaining walls, or other mechanisms to prevent material movement. In addition, the sides of the landfilling shall be appropriately sloped to prevent erosion and sedimentation, during both the landfilling activities and afterwards.
8. Fill materials shall be clean sand, gravel, soil, rock, or similar material. Use of polluted dredge spoils and sanitary landfilling materials is prohibited. The property owner shall provide evidence that the material has been obtained from a clean source prior to fill placement.
9. Landfilling shall be designed to allow surface water penetration into aquifers, if such conditions existed prior to the fill. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.230.230 Signs.**

- A. **Sign Policies.** Signs should be designed and placed so that they are compatible with the natural quality of the shoreline environment and adjacent land and water uses.
- B. **Sign Regulations.** Signs within the City, including the shoreline area, are subject to the requirements and standards specified in Chapter 20.50 SMC, Subchapter 8. Signs are based on the underlying zoning. In addition, the following sign requirements shall apply to signs within shoreline areas:
  1. Signs shall only be allowed in or over water for navigation purposes; at road or railroad crossings as

necessary for operation, safety, and direction; or as related and necessary to a water-dependent use.

2. Signs are permitted in all shoreline environments upland of the OHWM. These sign standards supplement the provisions of SMC 20.50.530 to 20.50.610. Where there is a conflict, the provisions herein shall apply.

**C. Prohibited Signs.**

1. All prohibited signs per SMC 20.50.550.
2. Balloons, any inflatable signs, or inflatable objects used to aid in promoting the sale of products, goods, services, events, or to identify a building.
3. Searchlights and beacons.
4. Electronic reader boards or changing message signs.
5. Neon signs.
6. Pole signs.
7. Backlit awnings used as signs.
8. Internally illuminated signs, except as allowed in subsection (D)(1) of this section.
9. Signs that impair visual access from public viewpoints in view corridors are prohibited in all shoreline environments.

**D. Illumination of Signs.**

1. Illumination of signs is only allowed as permitted by the underlying zoning.
2. Internal illumination of signs is only allowed with light provided by LED or other Energy Star rated luminaires, and is limited to:
  - a. Opaque cabinet signs where light only shines through the letters, not including symbols, images, or background; or
  - b. Shadow lighting, where letters are backlit, but light only shines through the edges of the letters.
3. All externally illuminated signs shall shield nearby properties from direct lighting. Light source must be within a maximum of six feet from the sign display, and limited to LED or other Energy Star rated luminaires.

4. No commercial sign shall be illuminated after 11:00 p.m. unless the commercial enterprise is open for business, and then may remain on only as long as the business is open.
5. The light from any illuminated sign shall be shaded, shielded, or directed so that the light intensity or brightness shall not adversely affect:
  - a. Surrounding or facing premises;
  - b. Safe vision of operators of vehicles on public or private roads, highways, or parking areas; or
  - c. Safe vision of pedestrians on a public right-of-way.
6. Light from any sign shall not shine on, nor directly reflect into, residential structures, lots, or the water.
7. These provisions shall not apply to:
  - a. Lighting systems owned or controlled by any public agency for the purpose of directing or controlling navigation, traffic, and highway or street illumination;
  - b. Aircraft warning lights;
  - c. Temporary lighting used for repair or construction as required by governmental agencies; or
  - d. Temporary use of lights or decorations relating to religious or patriotic festivities. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

#### **20.230.240 Stormwater management facilities.**

##### **A. Stormwater Management Facilities Policies.**

1. Stormwater facilities located in the shoreland area should be maintained only to the degree necessary to ensure the capacity and function of the facility, including the removal of nonnative, invasive plant species.
2. The stormwater facility should be planted with native vegetation.

##### **B. Stormwater Management Facility Regulations.**

1. New stormwater facilities shall be located so as not to require any shoreline protection works.
2. Stormwater facility development shall include public access to the shoreline, trail systems, and other forms of recreation, providing such uses will not unduly interfere with stormwater facility operations, endanger the public health, safety, and welfare, or create a significant and disproportionate liability for the owner.



3. Construction of stormwater facilities in shoreland areas shall be timed to avoid fish and/or wildlife migratory and spawning periods. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

### **20.230.250 Transportation.**

Transportation facilities are those structures and developments that aid in land and water surface movement of people, goods, and services. They include roads and highways, bridges and causeways, bikeways, trails, railroad facilities, and boat and floatplane terminals.

#### **A. Transportation Policies.**

1. New roads within the shoreline area should be minimized.
2. Roads and railroad locations should be planned to fit the topographical characteristics of the shoreline such that alteration of natural conditions is minimized.
3. Pedestrian and bicycle trails should be encouraged.
4. When existing transportation corridors are abandoned they should be reused for water- dependent use or public access.
5. Alternatives to new roads or road expansion in the shoreline area should be considered as a first option.
6. Joint use of transportation corridors within shoreline jurisdiction for roads, utilities, and motorized forms of transportation should be encouraged.
7. New roads should be designed to accommodate bicyclists, pedestrians, and transit, where feasible.

#### **B. Transportation Regulations.**

1. Transportation facilities and services shall utilize existing transportation corridors wherever possible, provided the shoreline is not adversely impacted and the development is otherwise consistent with this Master Program.
2. Transportation and primary utilities shall jointly use rights-of-way.
3. Landfilling activities for transportation facility development are prohibited in wetlands and on accretion beaches, except when all structural and upland alternatives have proven infeasible, and the transportation facilities are necessary to support uses consistent with this Master Program.
4. Major new roads and railways shall avoid being located in the shoreline jurisdiction to the extent practical. These roads shall cross shoreline areas by the shortest, most direct route, unless this route would cause more damage to the environment.

5. New transportation facilities shall be located and designed to minimize or prevent the need for shoreline modification.
6. All bridges must be built high enough to allow the passage of debris, and provide three feet of clearance above the base flood elevation.
7. Shoreline transportation facilities shall be located and designed to avoid steep or unstable areas and fit the existing topography in order to minimize cuts and fills.
8. Bridge abutments and necessary approach fills shall be located landward of the OHWM, except bridge piers may be permitted in a water body as a shoreline conditional use. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

**20.230.260 Unclassified uses and activities.**

In the event that a proposed shoreline use or activity is not identified or classified in this Master Program, the following regulation shall apply:

- A. **Regulations.** All uses and activities proposed in the shoreline area that are not classified by provisions in this Master Program shall require a shoreline conditional use permit. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

**20.230.270 Utilities.**

Primary utilities include substations; pump stations; treatment plants; sanitary sewer outfalls; electrical transmission lines greater than 55,000 volts; water, sewer or storm drainage mains greater than eight inches in diameter; gas and petroleum transmission lines; and submarine telecommunications cables. Accessory utilities include local public water, electric, natural gas distribution, public sewer collection, cable and telephone service, and appurtenances.

A. **Utility Policies.**

1. Utilities should utilize existing transportation and utility sites, rights-of-way, and corridors whenever possible. Joint use of rights-of-way and corridors should be encouraged.
2. Unless no other feasible alternative exists, utilities should be prohibited in the shoreline jurisdiction, wetlands, and other critical areas. There shall be no net loss of ecological functions or significant impacts to other shoreline resources or values.
3. New utility facilities should be located so as not to require extensive shoreline modifications.
4. Whenever possible, utilities should be placed underground or alongside or under bridges.
5. Solid waste disposal activities and facilities should be prohibited in shoreline areas.

**B. Utility Regulations.**

1. Utility development shall provide for compatible, multiple use of sites and rights-of-way when practical.
2. Utility development shall include public access to the shoreline, trail systems, and other forms of recreation, providing such uses will not unduly interfere with utility operations; endanger the public health, safety, and welfare; or create a significant and disproportionate liability for the owner.
3. The following primary utilities, which are not essentially water-dependent, may be permitted as a shoreline conditional use if it can be shown that no reasonable alternative exists:
  - a. Water system treatment plants;
  - b. Sewage system lines, interceptors, pump stations, and treatment plants;
  - c. Electrical energy generating plants, substations, lines, and cables; or
  - d. Petroleum and gas pipelines.
4. New solid waste disposal sites and facilities are prohibited.
5. New utility lines including electricity, communications, and fuel lines shall be located underground, except where the presence of bedrock or other obstructions make such placement infeasible.
6. Transmission and distribution facilities shall cross shoreline areas by the shortest, most direct route feasible, unless such route would cause increased environmental damage.
7. Utilities requiring withdrawal of water shall be located only where minimum flows as established by WDFW can be maintained.
8. Utilities shall be located and designated so as to avoid the use of any structural or artificial shoreline modification.
9. All underwater pipelines are prohibited. If no other alternative exists, a shoreline conditional use permit is required. (Ord. 856 § 2 (Exh. A), 2019; Ord. 668 § 4 (Exh. 3), 2013).

**Chapter 20.240**  
**SMP Critical Areas Regulations**

Sections:

Subchapter 1. Critical Areas – General Provisions

[20.240.010 Purpose.](#)

[20.240.015 Applicability.](#)

[20.240.020 Relationship to other regulations.](#)

[20.240.025 Critical areas maps.](#)

[20.240.040 Allowed activities.](#)

[20.240.045 Critical areas preapplication meeting.](#)

[20.240.050 Alteration of critical areas.](#)

[20.240.053 Mitigation requirements.](#)

[20.240.056 Shoreline restoration projects – Relief from shoreline master program development standards and use regulations.](#)

[20.240.060 Best available science.](#)

[20.240.070 Classification and rating of critical areas.](#)

[20.240.080 Critical area report – Requirements.](#)

[20.240.082 Mitigation plan requirements.](#)

[20.240.085 Pesticides, herbicides and fertilizers on City-owned property.](#)

[20.240.090 Buffer areas.](#)

[20.240.100 Notice to title.](#)

[20.240.110 Permanent field marking.](#)

[20.240.120 Financial guarantee requirements.](#)

[20.240.130 Unauthorized critical area alterations.](#)

Subchapter 2. Geologic Hazard Areas

[20.240.210 Geologic hazards – Designation and purpose.](#)

[20.240.220 Geologic hazards – Classification.](#)

[20.240.222 Geologic hazards – Mapping.](#)

[20.240.224 Geologic hazards – Development standards.](#)

[20.240.230 Geologic hazard areas – Required buffer areas.](#)

[20.240.240 Geologic hazards – Critical area report requirements.](#)

[20.240.250 Geologic hazards – Mitigation performance standards and requirements.](#)

Subchapter 3. Fish and Wildlife Habitat Conservation Areas

[20.240.260 Fish and wildlife habitat – Description and purpose.](#)

[20.240.270 Fish and wildlife habitat – Classification and designation.](#)

[20.240.272 Fish and wildlife habitat – Mapping.](#)

[20.240.274 Fish and wildlife habitat – General development standards.](#)

[20.240.276 Fish and wildlife habitat – Specific habitat development standards.](#)

[20.240.280 Fish and wildlife habitat – Required buffer areas.](#)

[20.240.290 Fish and wildlife habitat – Critical area report requirements.](#)

[20.240.300 Fish and wildlife habitat – Mitigation performance standards and requirements.](#)

Subchapter 4. Wetlands

[20.240.310 Wetlands – Purpose.](#)

[20.240.320 Wetlands – Designation and rating.](#)

[20.240.322 Wetlands – Mapping and delineation.](#)

[20.240.324 Wetlands – Development standards.](#)

[20.240.330 Wetlands – Required buffer areas.](#)

[20.240.340 Wetlands – Critical area report requirements.](#)

[20.240.350 Wetlands – Compensatory mitigation performance standards and requirements.](#)

Subchapter 5. Shoreline Flood Hazard Areas

[20.240.360 Floodplain management.](#)

[20.240.370 Flood hazard – Description and purpose.](#)

[20.240.380 Flood hazard – Development limitations.](#)

Subchapter 6. Aquifer Recharge Areas

[20.240.420 Aquifer recharge – Description and purpose.](#)

[20.240.430 Aquifer recharge – Designation and classification.](#)

[20.240.440 Aquifer recharge – Alteration.](#)

[20.240.450 Aquifer recharge – Performance standards and requirements.](#)

**Subchapter 1.**

**Critical Areas – General Provisions**

**20.240.010 Purpose.**

- A. The purpose of this chapter is to establish supplemental standards for the protection of critical areas and their associated buffers within the shoreline jurisdiction consistent with the goals and policies of the SMA.
- B. The provisions of this chapter do not extend beyond the shoreline jurisdiction limits specified in this Master Program and the SMA.
- C. By identifying and regulating development and alterations to critical areas and buffers within the shoreline jurisdiction it is the intent of this chapter to:
1. Protect the public from injury, loss of life, property damage or financial losses due to flooding, erosion, landslide, seismic events, or soils subsidence;
  2. Protect unique, fragile, and valuable elements of the environment;
  3. Reduce cumulative adverse environmental impacts to water quality, wetlands, streams, and other aquatic resources; fish and wildlife habitat; landslide hazards; and other geologically unstable features and

protect the functions and values of critical areas from overall net loss;

4. Ensure the long-term protection of ground and surface water quality;
5. Alert members of the public, including appraisers, assessors, owners, potential buyers, or lessees, to the development limitations of critical areas and their required buffers;
6. Serve as a basis for exercise of the City's substantive authority under SEPA, and the City's environmental procedures (Chapter 20.30 SMC, Subchapter 8);
7. To comply with the requirements of the SMA and its implementing regulations;
8. Establish standards and procedures that are intended to protect critical areas and their associated buffers within the shoreline jurisdiction while accommodating the rights of property owners to use their property in a reasonable manner; and
9. Provide for the management of critical areas and buffers within the shoreline jurisdiction so as not to result in a net loss of ecological functions and to restore degraded ecosystems.

D. This chapter is to be administered with flexibility and attention to site-specific characteristics.

E. For the purpose of this chapter, critical areas and buffers shall have the same meanings as set forth in Chapter 20.20 SMC and RCW 36.70A.030(5), as amended from time to time.

F. For the purpose of this chapter, when referring to "functions and values" or "functions," it is the critical area's functions and values in relationship to the shoreline ecological functions. (Ord. 856 § 2 (Exh. B), 2019).

#### **20.240.015 Applicability.**

A. Unless explicitly exempted, the provisions of this chapter shall apply to all land uses, development activity, and all structures and facilities within critical areas and buffers located within the City's shoreline jurisdiction, whether or not a permit or authorization is required, and shall apply to every person or entity that owns, leases, or administers land within the City's shoreline jurisdiction.

B. No person or entity shall alter a critical area or buffer in the shoreline jurisdiction except in compliance with the requirements of this chapter.

C. The City shall not approve any permit or otherwise issue any authorization to alter the condition of any land, water, or vegetation or to construct or alter any structure or improvement in the shoreline jurisdiction without first assuring compliance with the requirements of this chapter.

D. Approval of a permit or development proposal pursuant to the provisions of this chapter does not discharge the obligation of the applicant to comply with the provisions of this chapter.

E. The provisions of this chapter shall apply to any forest practices over which the City has jurisdiction pursuant to Chapter 76.09 RCW and WAC Title 222, as amended from time to time. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.020 Relationship to other regulations.**

A. These critical area regulations shall apply as an overlay in addition to use and development regulations established by the City consistent with the SMA and this Master Program. In the event of any conflict between these regulations and any other regulations of the City, the regulations that provide greater protection to the critical areas shall apply.

B. Areas characterized by particular critical areas may also be subject to other regulations established by this chapter due to the overlap or multiple functions of some critical areas. In the event of any conflict between regulations for particular critical areas in this chapter, the regulations that provide greater protection to critical areas shall apply.

C. These critical areas regulations shall apply concurrently with review conducted under SEPA, as necessary and locally adopted. Any conditions required pursuant to this chapter shall be included in the SEPA review and threshold determination.

D. Compliance with the provisions of this chapter does not constitute compliance with other Federal, State, and local regulations and permit requirements that may be required (for example, shoreline substantial development permits, Hydraulic Permit Act (HPA) permits, Section 106 of the National Historic Preservation Act, USACE Section 404 permits, or National Pollution Discharge Elimination System permits). The applicant is responsible for complying with these requirements, apart from the process established in this chapter. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.025 Critical areas maps.**

A. The approximate location and extent of identified critical areas within the City's planning area are shown on the critical areas maps adopted as part of this chapter, including but not limited to the maps identified in SMC [20.240.222](#), [20.240.272](#), and [20.240.322](#). These maps shall be used for informational purposes as a general guide only for the assistance of property owners and other interested parties. Boundaries and locations indicated on the maps are generalized. Critical areas and their buffers may occur within the shoreline jurisdiction that have not previously been mapped. A site inspection by staff or an applicant's critical area worksheet may also indicate the presence of a critical area.

B. Based on an indicated critical area in subsection A of this section, the actual presence or absence of, and delineation and classification of, critical areas shall be identified in the field by a qualified professional, and confirmed by the City, according to the procedures, definitions and criteria established by SMC [20.240.080](#)(D)(1) and (2). In the event of any conflict between the critical area location or designation shown on the City's maps and the criteria or standards of this chapter, the criteria and standards of this chapter shall prevail.

C. The critical areas maps shall be periodically updated by the City and shall reflect any permit activity,



results of special studies and reports reviewed and approved by the City, amendments to the Comprehensive Plan Natural Environment Element, and Department-identified errors and corrections. (Ord. 856 § 2 (Exh. B), 2019).

#### **20.240.040 Allowed activities.**

A. **Critical Area Report.** Activities allowed under this section shall have been reviewed and permitted or approved by the City and any other agency with jurisdiction, but do not require submittal of a separate critical area report, unless such submittal was required previously for the underlying permit. The Director may apply conditions to the underlying permit or approval to ensure that the allowed activity is consistent with the provisions of this chapter to protect critical areas.

B. **Best Management Practices.** All allowed activities shall be conducted using the best management practices that result in the least amount of impact to the critical areas. Best management practices shall be used for tree and vegetation protection, construction management, erosion and sedimentation control, water quality protection, and regulation of chemical applications. The City shall require the use of best management practices to ensure that the activity does not result in degradation to the critical area. Any incidental damage to, or alteration of, a critical area shall be restored, rehabilitated, or replaced at the responsible party's expense.

C. **Allowed Activities.** The following activities are allowed:

1. **Modifications to Existing Structures within Critical Areas.** Structural modification of, addition to, maintenance, repair, or replacement of legally nonconforming structures consistent with SMC [20.220.150](#), which do not meet the building setback or buffer requirements for wetlands, fish and wildlife habitat conservation areas, or geologic hazard areas if the modification, addition, replacement, or related activity does not increase the existing building footprint of the structure or area of hardscape lying within the critical area or buffer. Within landslide hazard areas, additions that add height to a nonconforming structure may only be allowed with review of a critical area report demonstrating that no increased risk of the hazard will occur. If such modification, alteration, repair, or replacement requires temporary or construction related encroachment into a critical area or a critical area buffer to perform the work, then encroachment may be allowed subject to restoration of the area of encroachment to a same or better condition.

2. **Demolition.** Demolition of structures located within critical areas or their buffers, excluding demolition of structures necessary to support or stabilize landslide hazard areas, and subject to approval of a stormwater pollution prevention plan consistent with the adopted stormwater manual and clearing limits that will adequately protect the critical area.

3. **Permit Requests Subsequent to Previous Critical Area Review.** A permit or approval sought as part of a development proposal for which multiple permits are required is exempt from the provisions of this chapter, except for the notice to title provisions, as applicable if:

- a. The City has previously reviewed all critical areas on the site; and

- b. There is no material change in the development proposal since the prior review; and
- c. There is no new information available that may alter previous critical area review of the site or a particular critical area; and
- d. The permit or approval under which the prior review was conducted has not expired or, if no expiration date, no more than five years have lapsed since the issuance of that permit or approval; and
- e. The prior permit or approval, including any conditions, has been complied with. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.045 Critical areas preapplication meeting.**

- A. A preapplication meeting, pursuant to SMC 20.30.080, is required prior to submitting an application for development or use of land that may impact critical areas or buffers within the shoreline jurisdiction.
- B. A determination may be provided through the preapplication meeting regarding whether critical area reports are required, and if so what level of detail and what elements may be necessary for the proposed project. An applicant may submit a critical area delineation and classification study prior to the City determining that a full critical area report is required.

This determination does not preclude the Director from requiring additional critical area report information during the review of the project. After a site visit and review of available information for the preapplication meeting, the Director may determine:

- 1. **No Critical Areas Present.** If the Director's analysis indicates that the project area is not within or adjacent to a critical area or buffer and that the proposed activity is unlikely to result in a net loss of shoreline ecological functions provided by the critical area or buffer, then the Director shall determine that the critical area review is complete and note in the preapplication meeting summary letter the reasons that no further review is required.
- 2. **Critical Areas Present, but No Impact.** If the Director determines that there are critical areas within or adjacent to the project area, but that the best available science shows that the proposed activity is unlikely to result in a net loss of shoreline ecological functions provided by the critical area or buffer, the Director may waive the requirement for a critical area report. A waiver may be granted if there is substantial evidence that all of the following requirements will be met:
  - a. There will be no alteration of the critical area or buffer;
  - b. The development proposal will not impact the critical area in a manner contrary to the purpose, intent, and requirements of this chapter, this Master Program, and the SMA; and
  - c. The proposal is consistent with other applicable regulations and standards.

A summary of this analysis and the findings shall be included in the preapplication meeting summary letter and any staff report or decision on the underlying permit.

3. **Critical Areas May Be Affected by Proposal.** If the Director determines that a critical area(s) or buffer(s) may be affected by the proposal, then the Director shall notify the applicant that a critical area report(s) shall be submitted prior to further review of the project, and indicate each of the critical area types that should be addressed in the report. Additionally, the Director may indicate the sections or report types that shall be included in the critical report(s) consistent with SMC [20.240.080](#). (Ord. 856 § 2 (Exh. B), 2019).

#### **20.240.050 Alteration of critical areas.**

In general, critical areas and buffers shall be maintained in their existing state including undisturbed, native vegetation to maintain the functions, values, resources, and public health and safety for which the critical areas and buffers are protected or allowed as the current, developed, legally established condition such as graded areas, structures, pavement, gardens, and lawns. Alteration of critical areas, including their established buffers, may only be permitted subject to the criteria and standards in this chapter, and compliance with any Federal and/or State permits required. Unless otherwise provided in this chapter, if alteration of the critical area is unavoidable, all adverse impacts to or from critical areas and buffers resulting from a development proposal or alteration shall be mitigated using the best available science in accordance with an approved critical areas report, so as to result in no overall net loss of shoreline ecological function provided by the critical area and no increased risk of hazards. Alterations that exceed the allowances of or that do not meet the approval criteria of this chapter can only be authorized through a shoreline variance consistent with SMC [20.220.040](#). (Ord. 856 § 2 (Exh. B), 2019).

#### **20.240.053 Mitigation requirements.**

Mitigation shall ensure that each permitted development or use will not cause a net loss of ecological functions of the shoreline as provided by the critical area or buffer and prevent risk from a hazard posed by a critical area. Mitigation shall not be implemented until after the Director has provided approval of a critical areas report that includes a mitigation plan.

A. **Mitigation Sequencing.** This section applies to mitigation required with all critical areas reviews, approvals, and enforcement pursuant to this chapter. This section is supplemented with specific measures under subchapters for particular critical areas. Mitigation for specific development proposals may include a combination of the measures below and shall be designed and constructed in accordance with the provisions of this section. Before impacting any critical areas or buffers, an applicant shall demonstrate that the following actions have been taken in the following sequential order of preference:

1. Avoiding the impact altogether by not taking a certain action or parts of actions;
2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps, such as project redesign, relocation, or timing, to

avoid or reduce impacts;

3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment or by restoring or stabilizing the hazard area through natural, engineering, or other methods;
4. Reducing or eliminating the impact over time through preservation and maintenance operations during the life of the action;
5. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or
6. Monitoring, measuring, and reporting the impact to the Director and taking appropriate corrective measures.

B. Applicants shall first demonstrate an inability to avoid or reduce impacts before the use of actions to mitigate potential impacts will be allowed. No activity or use shall be allowed that results in a net loss of the shoreline ecological functions provided by the critical areas or buffers or has a significant adverse impact on other shoreline functions fostered by the policies of this Master Program and the SMA.

C. **Type, Location, and Timing of Mitigation.** Unless it is demonstrated that a higher level of ecological functioning or greater reduction of hazard risk would result from an alternative approach or as otherwise allowed in this chapter, mitigation for adverse impacts shall be based on best available science, with preferential consideration given to measures that replace the impacted functions directly and in immediate vicinity of the impact and prior to the activities that will disturb the critical area. Mitigation measures that cannot be implemented prior to the critical area impacts shall be completed immediately following disturbance and prior to use or occupancy of the action or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.

1. The Director may authorize a one-time temporary delay in completing construction or installation of the mitigation when the applicant provides a written explanation from a qualified professional as to the rationale for the delay. An appropriate rationale would include identification of the environmental conditions that could produce a high probability of failure or significant construction difficulties (e.g., project delay lapses past a fisheries window, or installing plants should be delayed until the dormant season to ensure greater survival of installed materials). The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, or general welfare of the public. The request for the temporary delay shall include a written justification that documents the environmental constraints that preclude implementation of the compensatory mitigation plan. The justification shall be verified and approved by the City. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.056 Shoreline restoration projects – Relief from shoreline master program development standards and use regulations.**

The City may grant relief from Master Program development standards and use regulations resulting from shoreline restoration projects consistent with criteria and procedures in WAC 173-27-215. Shoreline restoration projects, defined as projects designed to restore impaired ecological functions of a shoreline, shall be reviewed and permitted or approved by the City and any other agency with jurisdiction consistent with criteria established in WAC 173-27-215 and RCW 90.58.580, as amended from time to time. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.060 Best available science.**

**A. Protect Shoreline Ecological Functions Provided by Critical Areas with Special Consideration to Anadromous Fish.**

Critical area reports and decisions to alter critical areas or buffers shall rely on the best available science to protect the shoreline ecological functions provided by the critical areas and shall give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish, such as salmon and bull trout, and their habitat, where applicable.

**B. Best Available Science to Be Consistent with Criteria.** The best available science is that scientific information, obtained through a valid scientific process, that is applicable to the critical area prepared by local, State, or Federal natural resource agencies, a qualified scientific professional, or team of qualified scientific professionals that is consistent with criteria established in Chapter 365-195 WAC and RCW 36.70A.172, as amended from time to time.

**C. Characteristics of a Valid Scientific Process.** In the context of critical areas protection, a valid scientific process is one that produces reliable information useful in understanding the consequences of a local government's regulatory decisions, and in developing critical areas policies and development regulations that will be effective in protecting the shoreline ecological functions provided by the critical areas. To determine whether information received during the permit review process is reliable scientific information, the Director shall determine whether the source of the information displays the characteristics of a valid scientific process. Such characteristics are as follows:

1. **Peer Review.** The information has been critically reviewed by other persons who are qualified scientific experts in that scientific discipline. The proponents of the information have addressed the criticism of the peer reviewers. Publication in a referenced scientific journal usually indicates that the information has been appropriately peer reviewed;
2. **Methods.** The methods used to obtain the information are clearly stated and reproducible. The methods are standardized in the pertinent scientific discipline or, if not, the methods have been appropriately peer reviewed to ensure their reliability and validity;
3. **Logical Conclusions and Reasonable Inferences.** The conclusions presented are based on reasonable assumptions supported by other studies and consistent with the general theory underlying the assumptions. The conclusions are logically and reasonably derived from the assumptions and supported by the data presented. Any gaps in information and inconsistencies with other pertinent scientific information are adequately explained;

4. **Quantitative Analysis.** The data have been analyzed using appropriate statistical or quantitative methods;

5. **Context.** The information is placed in proper context. The assumptions, analytical techniques, data, and conclusions are appropriately framed with respect to the prevailing body of pertinent scientific knowledge; and

6. **References.** The assumptions, analytical techniques, and conclusions are well-referenced with citations to relevant, credible literature, and other pertinent existing information.

D. **Nonscientific Information.** Nonscientific information, such as anecdotal observations, nonexpert opinion, and hearsay, may supplement scientific information, but it is not an adequate substitute for valid and available scientific information.

E. **Absence of Valid Scientific Information.** Where there is an absence of valid scientific information or incomplete scientific information relating to a critical area, leading to uncertainty about the risk to shoreline ecological function provided by the critical area, for permitting an alteration of or impact to the critical area, the Director shall:

1. Take a “precautionary or a no-risk approach,” which strictly limits development and land use activities until the uncertainty is sufficiently resolved; and

2. Require application of an effective adaptive management program that relies on scientific methods to evaluate how well regulatory and nonregulatory actions protect the critical area. An adaptive management program is a formal and deliberate scientific approach to taking action and obtaining information in the face of uncertainty. An adaptive management program shall:

a. Address funding for the research component of the adaptive management program;

b. Change course based on the results and interpretation of new information that resolves uncertainties; and

c. Commit to the appropriate time frame and scale necessary to reliably evaluate regulatory and nonregulatory actions affecting protection of critical areas and anadromous fisheries. (Ord. 856 § 2 (Exh. B), 2019).

#### **20.240.070 Classification and rating of critical areas.**

To promote consistent application of the standards and requirements of this chapter, critical areas within the City’s shoreline jurisdiction shall be rated or classified according to their characteristics, function and value, and/or their sensitivity to disturbance. Classification of critical areas shall be determined by the City using the following tools:

- A. Application of the criteria contained in these regulations;
- B. Consideration of the critical area reports submitted by qualified professionals in connection with applications subject to these regulations; and
- C. Review of maps adopted pursuant to this chapter. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.080 Critical area report – Requirements.**

A. **Report Required.** If uses, activities, or developments are proposed within, adjacent to, or are likely to impact critical areas or their buffers, an applicant shall provide site-specific information and analysis in the form of critical area report(s) as required in this chapter. Critical area reports are required in order to identify the presence, extent, and classification/rating of potential critical areas, as well as to analyze, assess, and mitigate the potential adverse impact to or risk from critical areas for a development project. Critical area reports shall use standards for best available science in SMC [20.240.060](#). Critical area reports for two or more types of critical areas shall meet the report requirements for each type of critical area. The expense of preparing the critical area report(s) shall be borne by the applicant. This provision is not intended to expand or limit an applicant's other obligations under WAC 197-11-100, as amended from time to time.

B. **Preparation by Qualified Professional.** Critical area report(s) shall be prepared by qualified professional(s) as defined in SMC 20.20.042, with the required training and experience specific to the type(s) of critical area(s) present consistent with the requirements of SMC [20.240.240](#), [20.240.290](#), and [20.240.340](#). Proof of licensing, credentials, and resume of the qualified professional(s) preparing the report shall be submitted for review by the City to determine if the minimum qualifications are met.

C. **Third Party Review of Critical Area Reports.** Review of required critical area reports by a qualified professional under contract with or employed by the City will be required by the Director at the applicant's expense in any of the following circumstances:

1. The project requires a shoreline variance application or a shoreline conditional use permit; or
2. Third party review is specifically required by the provisions of this chapter for the critical area(s) or critical area buffer(s) potentially being impacted; or
3. When the Director determines such services are necessary to demonstrate compliance with the standards and guidelines of this chapter.

D. **Critical Area Report Types or Sections.** Critical area reports may be met in stages through multiple reports or combined in one report. A critical area report shall include one or more of the following sections or report types unless exempted by the Director based on the extent of the potential critical area impacts. The scope and location of the proposed project will determine which report(s) alone or combined are sufficient to meet the critical area report requirements for the impacted critical area type(s). The typical sequence of required sections or reports that will fulfill the requirements of this section includes:

1. **Reconnaissance.** The existence, general location, and type of critical areas in the vicinity of a project site (off site within 300 feet for wetlands and fish and wildlife habitat conservation areas and off site within 200 feet for geologic hazards, shorelines, floodplains, and aquifer recharge areas) of a project site (if allowed by the adjoining property owners). Determination of whether the project will adversely impact or be at risk from the potential critical areas based on maximum potential buffers and possible application of SMC [20.240.224](#)(B), [20.240.280](#)(D)(6) or [20.240.330](#)(G)(10) should be addressed;
2. **Delineation.** The extent, boundaries, rating or classification, and applicable standard buffers of critical areas where the project area could potentially impact the critical area or its buffer including an assessment of the characteristics of or functions and values of the critical area and buffers identified;
3. **Analysis.** The proposal and impact assessment report documenting the potential project impacts to the critical area and buffers including a discussion of the efforts taken to avoid, minimize, and reduce potential impacts to those areas;
4. **Mitigation.** The measures that prevent or compensate for the potential impacts of the project designed to meet the requirements of this chapter, in SMC [20.240.082](#), Mitigation plan requirements, and the standards for the specific critical areas impacted. Mitigation includes, but is not limited to, adjustments to required buffer sizes, best practices to minimize impacts, and critical area or buffer enhancement, restoration, or preservation plans. Mitigation plans include habitat management plans, revegetation, or replanting plans, and restoration plans;
5. **Maintenance and Monitoring.** The report should include goals of the mitigation proposed, performance standards for success, monitoring methods and reporting schedule, maintenance methods and schedule, and contingency actions. Maintenance and monitoring plans shall be consistent with the mitigation performance standards and requirements of this chapter, including SMC [20.240.250](#), [20.240.300](#), and [20.240.350](#).

E. **Minimum Report Contents.** At a minimum, critical area reports shall contain the following:

1. The name and contact information of the applicant;
2. Adequate information to determine compliance with the requirements of the critical area regulations, this chapter, including critical area report, impact and hazard assessment, and mitigation requirements specific to each critical area type, as indicated in the corresponding sections of this chapter;
3. The dates, names, and qualifications of the qualified professional(s) preparing the report and documentation of any fieldwork performed on the site;
4. A description of the proposal, proposal location including address and parcel number(s), and a vicinity map for the project;



5. Identification of the development permit(s) requested and all other local, State, and/or Federal critical area-related permits required for the project;
6. A copy of the site plan for the development proposal including:
  - a. A map to standard engineering scale depicting critical areas, buffers, the development proposal, and any areas to be altered. In addition to plan size site plans, a legible, reduced (eight and one-half inches by 11 inches) copy will be required if noticing is required for the project; and
  - b. A scaled depiction and description of the proposed stormwater pollution prevention plan, consistent with the adopted stormwater manual, for the development and consideration of impacts to critical areas due to drainage alterations;
7. Identification and characterization of all critical areas, wetlands, water bodies, shorelines, and buffers within the vicinity of the proposed project area (off site within 300 feet for wetlands and fish and wildlife habitat conservation areas and off site within 200 feet for geologic hazards, shorelines, floodplains, and aquifer recharge areas);
8. A statement specifying the accuracy of the report and all assumptions made and relied upon;
9. A description of the methodologies used to conduct the critical areas investigation, including references;
10. An assessment of the probable impacts to the critical areas resulting from the proposed development of the site based upon identified findings;
11. A description of reasonable efforts made to apply mitigation sequencing pursuant to SMC [20.240.053](#), Mitigation requirements, to avoid, minimize, and mitigate impacts to critical areas; and
12. Plans for mitigation required to offset any critical areas impacts, in accordance with SMC [20.240.082](#), Mitigation plan requirements, and the corresponding mitigation performance standards sections of this chapter, including a discussion of the applicable development standards and cost estimates for determination of financial guarantee requirements.

F. **Existing Reports.** Unless otherwise provided, a critical areas report may incorporate, be supplemented by, or composed of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the Director. At the discretion of the Director, reports previously compiled or submitted as part of a proposal for development may be used as a critical areas report to the extent that the requirements of this section and the report requirements for each specific critical area type are met. Critical areas reports shall be considered valid for five years; after such date the City shall determine whether a revision or additional assessment is necessary. Supplemental critical area report(s) may be required to provide information and analysis to address changes to the project scope and potential impacts to or

changes to applicable regulations that have been made subsequent to existing, valid critical area reports.

**G. Modifications to Report Requirements.**

1. **Limitations to Study Area.** The Director may limit the required geographic area of the critical areas report as appropriate if:

- a. The applicant, with assistance from the City, cannot obtain permission to access properties adjacent to the project area; or
- b. The proposed activity will affect only a limited part of the subject site.

2. **Modifications to Required Contents.** The applicant may consult with the Director prior to or during preparation of the critical areas report to obtain approval of modifications to the required contents of the report where, in the judgment of a qualified professional, more or less information is required to adequately address the potential critical area impacts and required mitigation. In some cases, such as when it is determined that no geologic hazard area is present, a full report may not be necessary to determine compliance with the critical area regulations, this chapter, and in those cases a letter or reconnaissance only report may be required.

3. **Additional Information Requirements.** The Director may require additional information to be included in the critical areas report when determined to be necessary to the review of the proposed activity in accordance with this chapter. Additional information that may be required includes, but is not limited to:

- a. Historical data, including original and subsequent mapping, aerial photographs, data compilations and summaries, and available reports and records relating to the site or past operations at the site;
- b. Grading and drainage plans; and
- c. Information specific to the type, location, and nature of the critical area. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.082 Mitigation plan requirements.**

When mitigation is required, the applicant shall submit for approval by the City a mitigation plan as part of the critical area report. Mitigation plans shall meet the minimum requirements of SMC [20.240.080](#) and the applicable mitigation performance standards and requirements for the impacted type(s) of critical area(s) and buffer(s), including but not limited to SMC [20.240.250](#), [20.240.300](#), and [20.240.350](#). When the mitigation plan is submitted separately from other types or sections of the required critical area report(s), the mitigation plan shall meet the minimum content requirements of SMC [20.240.080](#)(E) by inclusion or reference to other existing report(s). The mitigation plan shall include, at a minimum:

A. **Environmental Goals and Objectives.** The mitigation plan shall include a written report identifying

environmental goals and objectives of the mitigation proposed and including:

1. A description of the anticipated impacts to the critical areas, the mitigating actions proposed, and the purposes of the compensation measures, including the site selection criteria; identification of compensation goals; identification of shoreline ecological functions; and dates for beginning and completion of site compensation construction activities. The goals and objectives shall be related to the shoreline ecological functions provided by the impacted critical area; and
2. A review of the best available science supporting the proposed mitigation and a description of the report author's experience to date in restoring or creating the type of critical area proposed.

B. **Performance Standards.** The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained at the end of the required monitoring period and whether or not the requirements of this chapter, this Master Program, and the SMA have been met.

C. **Detailed Construction Plans.** The mitigation plan shall include written specifications and descriptions of the mitigation proposed, such as:

1. The proposed construction sequence, timing, and duration;
2. Site plans showing grading and excavation details with minimum two-foot contour intervals;
3. Erosion and sediment control features;
4. A planting plan specifying plant species, quantities, locations, size, spacing, and density; and
5. Measures to protect and maintain plants until established.

These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.

D. **Monitoring Program and Contingency Plan.**

1. A monitoring program shall be included in the mitigation plan and implemented by the applicant to determine the success of the mitigation project and any necessary corrective actions. This program shall determine if the original goals and objectives of the mitigation plan are being met.
2. A contingency plan shall be established for indemnity in the event that the mitigation project is inadequate or fails. Contingency plans include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met. Corrective measures will be required by the City when the qualified professional indicates, in a

monitoring report, that the contingency actions are needed to ensure project success by the end of the monitoring period. A performance and maintenance bond, or other acceptable financial guarantee, is required to ensure the applicant's compliance with the terms of the mitigation agreement consistent with SMC [20.240.120](#), Financial guarantee requirements.

3. Monitoring programs prepared to comply with this section shall include, at a minimum, the following requirements:

- a. Best available scientific procedures shall be used to establish the success or failure of the mitigation project. A protocol outlining the schedule for site monitoring (for example, monitoring shall occur in years zero [as-built], one, three, and five after site construction), and how the monitoring data will be evaluated to determine if the performance standards are being met.
- b. For vegetation determinations, permanent sampling points shall be established.
- c. Vegetative success shall, at a minimum, equal 80 percent survival of planted trees and shrubs and 80 percent cover of desirable understory or emergent plant species at the end of the required monitoring period. Alternative standards for vegetative success, including (but not limited to) minimum survival standards following the first growing season, may be required after consideration of recommendations provided in a critical area report or as otherwise required by the provisions of this chapter.
- d. A monitoring report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the mitigation project. Monitoring reports on the current status of the mitigation project shall be submitted, consistent with subsection E of this section, to the City on the schedule identified in the monitoring plan, but not less than every other year. The reports are to be prepared by a qualified professional and reviewed by the City, or a qualified professional retained by the City, and should include monitoring information on wildlife, vegetation, water quality, water flow, stormwater storage and conveyance, and existing or potential degradation, as applicable.
- e. Monitoring programs shall be established for a period necessary to establish that performance standards have been met, but not for less than a minimum of five years without approval from the Director.
- f. If necessary, failures in the mitigation project shall be corrected.
- g. Dead or undesirable vegetation shall be replaced with appropriate plantings.
- h. Damage caused by erosion, settling, or other geomorphological processes shall be repaired.
- i. The mitigation project shall be redesigned (if necessary) and the new design shall be implemented and monitored, as in subsection (D)(3)(d) of this section.

- j. Correction procedures shall be approved by a qualified professional and the City.
- k. If the mitigation goals are not obtained within the initial monitoring period, the applicant remains responsible for restoration of the impacted shoreline ecological functions provided by the critical areas or hazard risk reduction until the mitigation goals agreed to in the mitigation plan are achieved.

E. **Monitoring Reports.** Monitoring reports shall be submitted to the City consistent with the approved monitoring plan.

1. The as-built report, required prior to final inspection, shall, at a minimum, include documentation of the following to establish the baseline for monitoring:
  - a. Departures from the original approved plans;
  - b. Construction supervision provided by the qualified professional;
  - c. Approved project goals and performance standards;
  - d. Baseline data for monitoring per the approved monitoring methods;
  - e. Photos from established photo points; and
  - f. A site plan showing final mitigation as constructed or installed, monitoring points, and photo points.
2. Subsequent monitoring reports shall, at a minimum, include:
  - a. Monitoring visit observations, documentation, and analysis of monitoring data collected;
  - b. Photos from photo points;
  - c. Determination whether performance standards are being met; and
  - d. Maintenance and/or contingency action recommendations to ensure success of the project at the end of the monitoring period.
3. The applicant shall be responsible for the cost (at the current hourly rate) of review of monitoring reports and site inspections during the monitoring period, which are completed by the City or a qualified professional under contract with or employed by the City.

F. **Cost Estimates.** The mitigation plan shall include cost estimates that will be used by the City to calculate the amounts of financial guarantees, if necessary, to ensure that the mitigation plan is fully implemented. Financial guarantees ensuring fulfillment of the mitigation project, monitoring program, and any contingency measures shall be posted in accordance with SMC [20.240.120](#), Financial guarantee requirements.

G. **Approved Mitigation Projects – Signature.** On completion of construction, an as-built report for any approved mitigation project shall be prepared and signed off by the applicant's qualified professional and approved by the City. Signature of the qualified professional on the required as-built report and approval by the City will indicate that the construction has been completed as planned. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.085 Pesticides, herbicides and fertilizers on City-owned property.**

Pesticides, herbicides and fertilizers that have been identified by State or Federal agencies as harmful to humans, wildlife, or fish shall not be used in City-owned properties containing critical areas or their buffers within the shoreline jurisdiction except as allowed by the Director for the following circumstances:

- A. When the Director determines that an emergency situation exists where there is a serious threat to public safety, health, or the environment, and that an otherwise prohibited application shall be used as a last resort.
- B. Compost or fertilizer may be used for native plant revegetation projects in any location.
- C. Limited pesticide and herbicide use may be applied pursuant to the King County Noxious Weed Control Board best management practices, specific to the species needing control, when that is determined to be the best method of control for the location. Federal, State, and local regulations of pesticides and water quality shall be followed, including requirements for pesticide applicator licensing from the Washington State Department of Agriculture. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.090 Buffer areas.**

The establishment of buffer areas shall be required for all development proposals and activities in or adjacent to critical areas within the shoreline jurisdiction. In all cases the standard buffer shall apply unless the Director determines that additional buffer width is necessary or reduced buffer is sufficient to protect the shoreline ecological functions consistent with the provisions of this chapter, this Master Program, the SMA, and the recommendations of a qualified professional. The purpose of the buffer shall be to protect the integrity, function, value, and resources of the subject critical area for shoreline ecological function, and/or to protect life, property, and resources from risks associated with development on unstable or critical lands. The buffer shall consist of an undisturbed area of native vegetation. Buffers shall be protected during construction by placement of a temporary barricade if determined necessary by the City, on-site notice for construction crews of the presence of the critical area, and implementation of appropriate erosion and sedimentation controls. Restrictive covenants or conservation easements may be required to preserve and protect buffer areas. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.100 Notice to title.**

A critical area notice to title is required, as a condition of permit issuance or project approval, when a permit or development application is submitted for development on any property containing a critical area or buffer within the shoreline jurisdiction. The purpose is to inform subsequent purchasers of real property of the existence of critical areas. The notice to title applicable to the property shall be approved by the Director and City Attorney for compliance with this provision and be filed by the property owner, at their expense, with the King County Recorder's Office. This requirement can be met through recording of a notice to title prepared by the City,

establishment of a critical area tract, or recording of native growth protection area easement consistent with the following provisions:

A. **Notice to Title.** A notice to title is required when a permit is required for development on any property containing a critical area or buffer within the shoreline jurisdiction. The notice shall state that critical areas or buffers have been identified on the property within the shoreline jurisdiction and that limitations on actions in or affecting the critical area or buffer may exist. The notice shall run with the land. The title holder will have the right to challenge this notice and to have it extinguished if the critical area designation no longer applies. However, the titleholder shall be responsible for completing a critical area report, subject to approval by the Director, before the notice on title can be extinguished.

B. **Critical Area Tract.** Subdivisions, short subdivisions, and binding site plans shall establish a separate critical areas tract as a permanent protective measure for wetlands, fish and wildlife habitat conservation areas, and landslide hazard areas and their buffers located within the shoreline jurisdiction. The plat or binding site plan for the project shall clearly depict the critical areas tract, and shall include all of the subject critical area, any required buffer, and any additional lands included voluntarily by the developer. Restrictions to development within the critical area tract shall be clearly noted on the plat or plan. Restrictions shall be consistent with the SMA, this Master Program, and this chapter for the entire critical area tract. Should the critical area tract include several types of critical areas, the developer may establish separate critical areas tracts.

C. **Native Growth Protection Area.** Native growth protection area (NGPA) easements shall be required on a property where no subdivision, short subdivision, or binding site plan is proposed or required. Unless otherwise required in this chapter, NGPA easements shall be recorded on title for all affected parcels prior to approval of a development agreement, issuance of a master development plan permit, or issuance of a site development or building permit, when two or more dwelling units and/or nonresidential developments are proposed on one parcel, to delineate and protect those contiguous wetlands, fish and wildlife habitat conservation, and landslide hazard critical areas and their buffers located within the shoreline jurisdiction. The easement to be recorded shall clearly depict the critical area and the limits of the NGPA easement and shall include all of the subject critical area(s) and any required buffer(s). Restrictions to development within the NGPA easement shall be clearly noted in the easement and shall include the following:

1. That native vegetation will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion; limiting chemical applications of hazardous substances (pesticides, herbicides, fertilizers); maintaining slope stability; buffering; and protecting plants, fish, and animal habitat; and
2. The right of the City to enforce the terms of the restriction.

D. **Proof of Notice.** The applicant shall submit proof that the notice has been recorded on title before the City approves any development permit, including master development plan permits, for the property or, in the case of subdivisions, short subdivisions, binding site plans, or development agreements, at or before recording. (Ord.

856 § 2 (Exh. B), 2019).

**20.240.110 Permanent field marking.**

A. All critical areas tracts, easements, and dedications, or as recommended by a qualified professional, shall be clearly marked on the site using permanent markings, placed at least every 50 feet, which include the following text:

City of Shoreline Designated Critical Area. Activities, including clearing and grading, removal of vegetation, pruning, cutting of trees or shrubs, planting of nonnative species, and other alterations may be prohibited. Help protect and care for this area. Please contact the City of Shoreline with questions or concerns.

B. It is the responsibility of the landowner to maintain in perpetuity and replace if necessary all permanent field markings. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.120 Financial guarantee requirements.**

Bonds and other financial guarantees, and associated performance agreements or maintenance/defect/monitoring agreements, shall be required for projects with required mitigation or restoration of impacts to critical areas or critical area buffers consistent with the following:

A. A performance agreement and bond, or other acceptable financial guarantee, are required from the applicant when mitigation required pursuant to a development proposal is not completed prior to final permit approval, such as final plat approval or final building inspection. The amount of the performance bond(s) shall equal 125 percent of the cost of the mitigation project (after City mobilization is calculated).

B. A performance agreement and bond, or other acceptable financial guarantee, are required from the applicant when restoration is required for remediation of a critical area violation. The amount of the performance bond(s) shall equal 125 percent of the cost of the mitigation project (after City mobilization is calculated).

C. A maintenance/defect/monitoring agreement and bond, or other acceptable financial guarantee, are required to ensure the applicant's compliance with the conditions of the approved mitigation plan pursuant to a development proposal or restoration plan for remediation of a violation. The amount of the maintenance bond(s) shall equal 25 percent of the cost of the mitigation project (after City mobilization is calculated) in addition to the cost for monitoring for a minimum of five years. The monitoring portion of the financial guarantee may be reduced in proportion to work successfully completed over the period of the bond. The bonding period shall coincide with the monitoring period. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.130 Unauthorized critical area alterations.**

A. When a critical area or its buffer located within the shoreline jurisdiction has been altered in violation of this chapter, all ongoing development work shall stop and the critical area shall be restored. The City shall have the authority to issue a stop work order to cease all development, and order restoration measures at the owner's or other responsible party's expense to remediate the impacts of the violation of the provisions of this chapter.



**B. Requirement for Restoration Plan.** All development shall remain stopped until a restoration plan is prepared by the responsible party and an approved permit is issued by the City. Such a plan shall be prepared by a qualified professional using the best available science and shall describe how the actions proposed meet the minimum requirements described in subsection C of this section. The Director may, at the responsible party's expense, seek expert advice, including but not limited to third party review by a qualified professional under contract with or employed by the City, in determining if the plan meets the minimum performance standards for restoration. Submittal, review, and approval of required restoration plans for remediation of violations of this chapter, SMP Critical Areas Regulations, shall be completed through a site development permit application process.

**C. Minimum Performance Standards for Restoration.**

1. For alterations to aquifer recharge areas, wetlands, and fish and wildlife habitat conservation areas, the following minimum performance standards shall be met for the restoration; provided, that if the violator can demonstrate that greater shoreline ecological functions provided through the functions and values provided by these critical areas can be obtained, these standards may be modified:

- a. The previolation function and values of the affected critical areas and buffers shall be restored, including water quality and habitat functions;
- b. The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically, or previolation, found on the site in species types, sizes, and densities. The previolation functions and values should be replicated at the location of the alteration; and
- c. Information demonstrating compliance with the requirements in SMC [20.240.082](#), Mitigation plan requirements, and the applicable mitigation sections for the affected type(s) of critical area(s) and their buffer(s) shall be submitted to the Director with a complete site development permit application.

2. For alterations to flood hazard and geologic hazard areas, the following minimum performance standards shall be met for the restoration of a critical area; provided, that if the violator can demonstrate that greater safety can be obtained, these standards may be modified:

- a. The hazard shall be reduced to a level equal to, or less than, the previolation hazard;
- b. Any risk of personal injury resulting from the alteration shall be eliminated or minimized; and
- c. The hazard area and buffers shall be replanted with native vegetation sufficient to minimize the hazard and restore the functions and values.

**D. Site Investigation.** The Director is authorized to take such actions as are necessary to enforce this chapter. The Director shall present proper credentials and obtain permission before entering onto private

property.

E. **Penalties.** Any responsible party violating any of the provisions of this chapter may be subject to any applicable penalties per SMC 20.30.770, WAC 173-27-240, and RCW 90.58.200 and 90.58.210, as amended from time to time. (Ord. 856 § 2 (Exh. B), 2019).

## **Subchapter 2.**

### **Geologic Hazard Areas**

#### **20.240.210 Geologic hazards – Designation and purpose.**

A. Geologic hazard areas are those lands that are susceptible to erosion, landsliding, seismic, or other geological events as identified by WAC 365-190-120, as amended from time to time. These areas may not be suited for development activities because these areas may pose a threat to public health and safety. These areas also provide important shoreline ecological functions. Eroding coastal bluffs, called feeder bluffs, are the primary source of sediment for Puget Sound beaches and contribute to vital coastal processes. However, since most of the city's coastline consists of BNSF railroad right-of-way, opportunity for the natural erosion and sediment transport process is limited.

Areas susceptible to one or more of the following types of hazards shall be designated as geologic hazard areas:

1. Landslide hazard;
2. Seismic hazard;
3. Erosion hazard.

B. The primary purposes of geologic hazard area regulations are to avoid and minimize potential impacts to life and property from geologic hazards, conserve soil resources, protect shoreline ecological functions, and minimize structural damage relating to seismic hazards. This purpose shall be accomplished through appropriate levels of study and analysis, application of sound engineering principles, and regulation or limitation of land uses, including maintenance of existing vegetation, regulation of clearing and grading activities, and control of stormwater. (Ord. 856 § 2 (Exh. B), 2019).

#### **20.240.220 Geologic hazards – Classification.**

Geologic hazard areas shall be classified according to the criteria in this section as follows:

A. **Landslide Hazard Areas.** Landslide hazard areas are those areas potentially subject to landslide activity based on a combination of geologic, topographic, and hydrogeologic factors as classified in subsection B of this section with slopes 15 percent or steeper within a vertical elevation change of at least 10 feet or all areas of prior landslide activity regardless of slope. A slope is delineated by establishing its toe and top, and measuring the inclination over 10 feet of vertical relief (see Figure 20.240.220(A)). The edges of the geologic hazard are

identified where the characteristics of the slope cross-section change from one landslide hazard classification to another, or no longer meet any classification. Additionally:

1. The toe of a slope is a distinct topographic break that separates slopes inclined at less than 15 percent from slopes above that are 15 percent or steeper when measured over 10 feet of vertical relief; and
2. The top of a slope is a distinct topographic break that separates slopes inclined at less than 15 percent from slopes below that are 15 percent or steeper when measured over 10 feet of vertical relief.



**Figure 20.240.220(A): Illustration of slope calculation for determination of top and toe of landslide hazard area.**

B. **Landslide Hazard Area Classification.** Landslide hazard areas are classified as follows:

1. **Moderate to High Risk.**

- a. Areas with slopes between 15 percent and 40 percent and that are underlain by soils that consist largely of sand, gravel, or glacial till that do not meet the criteria for very high risk areas in subsection (B)(2) of this section;
- b. Areas with slopes between 15 percent and 40 percent that are underlain by soils consisting largely of silt and clay and do not meet the criteria for very high risk areas in subsection (B)(2) of this section; or
- c. All slopes of 10 to 20 feet in height that are 40 percent slope or steeper and do not meet the criteria for very high risk in subsection (B)(2)(a) or (b) of this section.

2. **Very High Risk.**

- a. Areas with slopes steeper than 15 percent with zones of emergent water (e.g., springs or ground

water seepage);

- b. Areas of landslide activity (scarps, movement, or accumulated debris) regardless of slope; or
- c. All slopes that are 40 percent or steeper and more than 20 feet in height when slope is averaged over 10 vertical feet of relief.



**Figure 20.240.220(B): Illustration of very high risk landslide hazard area delineation (no midslope bench).**

C. **Seismic Hazard Areas.** Seismic hazard areas are lands that, due to a combination of soil and ground water conditions, are subject to risk of ground shaking, lateral spreading, or subsidence or liquefaction of soils during earthquakes. These areas are typically underlain by soft or loose saturated soils (such as alluvium) or peat deposits and have a shallow ground water table. These areas are designated as having “high” and “moderate to high” risk of liquefaction as mapped on the Liquefaction Susceptibility and Site Class Maps of Western Washington State by County by DNR.

D. **Erosion Hazard Areas.** Erosion hazard areas are lands or areas underlain by soils identified by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (formerly the Soil Conservation Service) as having “severe” or “very severe” erosion hazards. This includes, but is not limited to, the following group of soils when such soils occur on slopes of 15 percent or greater: Alderwood-Kitsap (AkF), Alderwood gravelly sandy loam (AgD), Kitsap silt loam (KpD), Everett (EvD), and Indianola (InD). (Ord. 856 § 2 (Exh. B), 2019).

#### **20.240.222 Geologic hazards – Mapping.**

A. The approximate location and extent of geologic hazard areas are shown on City of Shoreline geologic hazard data layers maintained in the City geographic information system (GIS) and shown in Figure 20.230.080. In addition, the following maps and resources providing information on the location and extent of geologic hazard areas are hereby adopted by reference as amended:

1. Department of Ecology coastal zone atlas (for marine bluffs);
2. U.S. Geological Survey geologic maps, landslide hazard maps, and seismic hazard maps;
3. DNR seismic hazard maps for Western Washington, including, but not limited to, the Liquefaction Susceptibility and Site Class Maps of Western Washington State by County;
4. DNR slope stability maps; and
5. Soils maps produced by the USDA National Resources Conservation Service.

B. The critical areas maps and the resources cited above are to be used as a guide for the City of Shoreline Planning and Community Development Department, project applicants, and/or property owners and may be continuously updated as new critical areas are identified. These maps and resources are a reference and do not provide a final critical area designation. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.224 Geologic hazards – Development standards.**

A. Development, activities, and uses shall be allowed in geologic hazard areas and their required buffers only as provided for in this chapter.

B. **Activities Allowed in All Geologic Hazard Areas and Buffers.** The activities listed below are allowed in the identified geologic hazard areas types pursuant to SMC [20.240.040](#), Allowed activities, and subject to applicable permit approvals. These activities do not require submission of a critical area report.

1. All allowed activities per SMC [20.240.040](#);
2. Installation of fences as allowed without a building permit in Chapter 20.50 SMC, General Development Standards; and
3. Nonstructural interior remodel, maintenance, or repair of structures that do not meet the standards of this chapter, if the maintenance or repair does not increase the footprint or height of the structure and there is no increased risk to life or property as a result of the proposed maintenance or repair.

C. **Alteration.** The City may approve, condition, or deny proposals in a geologic hazard area based upon the effective mitigation of risks posed to property, health and safety, and compensation of the loss of shoreline ecological functions. The objective of mitigation measures shall be to render a site containing a geologic hazard as safe as one not containing such hazard. Conditions may include applicable stormwater management practices, limitations of proposed uses, modification of density, alteration of site layout, and other appropriate changes to the proposal.

Where potential impacts cannot be effectively mitigated to ensure no net loss of the shoreline ecological functions provided by the critical area, and to eliminate a significant risk to public health and safety, and

property or other critical area, the proposal shall be denied, except as granted by a shoreline variance consistent with SMC [20.220.040](#).

**D. Alteration of Moderate to High Risk Landslide Hazards.** Development activities and uses that result in unavoidable alterations may be permitted in moderate to high risk landslide hazard areas or their buffers in accordance with an approved geologic hazard critical area report. The recommendations contained within the critical area report shall be incorporated into the proposed alteration of the landslide hazard area or its buffers.

The critical area report shall certify that:

1. The risk of damage from the proposal, both on site and off site, is minimal subject to the conditions set forth in the report;
2. The proposal will not increase the risk of occurrence of the potential landslide hazard; and
3. Measures to eliminate or reduce risks have been incorporated into the report's recommendations and project development plans.

**E. Alteration of Very High Risk Landslide Hazard Areas.** Alterations of a very high risk landslide hazard area and/or buffer may only occur for activities for which a critical area report with a hazards analysis is submitted and certifies that:

1. The development will not increase surface water discharge or sedimentation on site or to adjacent properties beyond predevelopment conditions;
2. The development will not decrease slope stability on the site or on adjacent properties;
3. Such alterations will meet other critical areas regulations; and
4. The design criteria in subsection F of this section are met.

**F. Design Criteria for Alteration of Very High Risk Landslide Hazard Areas.** Development within a very high risk landslide hazard area and/or buffer shall be designed to meet the following basic requirements unless it can be demonstrated that an alternative project design provides greater short- and long-term slope stability while meeting all other provisions of this chapter. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function. The basic development design criteria are:

1. The proposed development shall not decrease the factor of safety for landslide occurrences below the limits of 1.5 for static conditions and 1.2 for dynamic conditions. Proposed alteration of natural slopes, that does not include structures, shall not decrease the factor of safety for landslide occurrences below the limits of 1.3 for static conditions and 1.0 for seismic. Where the existing conditions are below these limits, the proposed development shall increase the factor of safety to these limits or will not be permitted.

Analysis of dynamic conditions shall be based on the seismic event as established by the current version of the International Building Code;

2. New structures and improvements shall be clustered to avoid geologic hazard areas and other critical areas;
3. New structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography;
4. New structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;
5. The proposed development shall not result in greater risk of the hazard or a need for increased buffers on neighboring properties;
6. Where the existing natural slope area cannot be retained undisturbed with native vegetation, the use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes; and
7. Development shall be designed to minimize impervious lot coverage and preserve native vegetation and trees to the maximum extent practicable.

**G. Additional Requirements for Alteration of Very High Risk Hazard Landslide Areas.**

1. Prior to application, the applicant shall meet the requirements of and conduct a neighborhood meeting consistent with SMC 20.30.090. The notification area shall be limited to:
  - a. All property owners whose properties adjoin the subject property; and
  - b. Properties that include part of the subject property's very high risk landslide hazard area and the standard 50-foot buffer, but not to exceed a maximum of 200 feet from the project clearing limits.
2. Prior to permit issuance, the property owner shall sign and record on title, at the owner's sole expense, a covenant in a form acceptable to the City, which:
  - a. Acknowledges and accepts the risks of development in the landslide hazard area;
  - b. Waives any rights to claims against the City;
  - c. Indemnifies and holds harmless the City against claims, losses, and damages;
  - d. Informs subsequent owners of the property of the risks and the covenant; and

- e. Advisability of obtaining added insurance.
3. Prior to permit issuance, the piling and excavation contractors shall submit insurance bonding documentation that includes coverage for subsidence and underground property damage, listing the City as an additional insured. The Director may require adequate bonds and/or insurance to cover potential claims for property damage that may arise from or be related to the following:
- a. Excavation or fill within a landslide-prone area when the depth of the proposed excavation exceeds four feet and the bottom of the proposed excavation is below the 100 percent slope line (45 degrees from a horizontal line) from the property line; or
  - b. In other circumstances where the Director determines that there is a potential for significant harm to any type of critical area or a critical area buffer during the construction process.
4. If the Building Official has reasonable grounds to believe that an emergency exists because significant changes in geologic conditions at a project site or in the surrounding area may have occurred since a permit was issued, increasing the risk of damage to the proposed development, to neighboring properties, or to nearby surface waters, the Building Official may, by letter or other reasonable means of notification, suspend the permit until the applicant has submitted a letter of certification. The letter of certification shall be based on such factors as the presence of known slides, indications of changed conditions at the site or the surrounding area, or other indications of unstable soils and meet the following requirements:
- a. The letter of certification shall be from the current project qualified professional geotechnical engineer of record stating that a qualified professional geotechnical engineer has inspected the site and area surrounding the proposed development within the 60 days preceding submittal of the letter; and that:
    - i. In the project geotechnical engineer's professional opinion no significant changes in conditions at the site or surrounding area have occurred that render invalid or out-of-date the analysis and recommendations contained in the technical reports and other application materials previously submitted to the City as part of the application for the permit; or that
    - ii. In the project geotechnical engineer's professional opinion, changes in conditions at the site or surrounding area have occurred that require revision to project criteria and that all technical reports and any necessary revised drawings that account for the changed conditions have been prepared and submitted.
5. The letter of certification and any required revisions shall be reviewed and approved by the City's third party qualified professional, at the applicant's expense, before the Building Official may allow work to continue under the permit.

H. **Alteration of Seismic Hazard Areas.** Development activities and uses in seismic hazard areas may be



permitted, based on review of a critical area report demonstrating that the project is consistent with SMC [20.240.053](#)(A)(2) through (6). The report shall certify that the risks of damage from the proposal, both on site and off site, are minimal subject to the conditions set forth in the report, that the proposal will not increase the risk of occurrence of the potential hazard, and that measures to eliminate or reduce risks have been incorporated into the report's recommendations. The report shall include the following:

1. For one-story and two-story detached residential structures, a qualified professional shall conduct an evaluation of site response and liquefaction potential based on current mapping, site reconnaissance, and research of nearby studies.
2. For all other proposals, the qualified professional shall conduct an evaluation of site response and liquefaction potential including sufficient subsurface exploration to determine the site coefficient for use in the static lateral force procedure described in the International Building Code.

I. **Alteration of Erosion Hazard Areas.** Development activities and uses in erosion hazard areas may be permitted, based on review of a critical area report demonstrating that the project is consistent with SMC [20.240.053](#)(A)(2) through (6) and the following provisions:

1. All development proposals on sites containing erosion hazard areas shall include a stormwater pollution prevention plan consistent with the requirements of the adopted stormwater manual and a mitigation plan to ensure revegetation and permanent stabilization of the site. Specific requirements for revegetation in mitigation plans shall be consistent with the mitigation plan requirements in SMC [20.240.082](#) and the mitigation performance standards for geologic hazard areas in SMC [20.240.250](#). Revegetation for site stabilization may be combined with required landscape, tree retention, and/or other critical area mitigation plans as appropriate.
2. All subdivisions, short subdivisions, or binding site plans on sites with erosion hazard areas shall comply with the following additional requirements:
  - a. Except as provided in this section, existing vegetation shall be retained on all lots until building permits are approved for development on individual lots;
  - b. If any vegetation on the lots is damaged or removed during construction of the subdivision infrastructure, the applicant shall be required to implement the revegetation plan in those areas that have been impacted prior to final inspection of the site development permit or the issuance of any building permit for the subject property;
  - c. Clearing of vegetation on individual lots may be allowed prior to building permit approval if the City determines that:
    - i. Such clearing is a necessary part of a large-scale grading plan;

- ii. It is not feasible to perform such grading on an individual lot basis; and
  - iii. Drainage from the graded area will meet established water quality standards.
3. Where the City determines that erosion from a development site poses a significant risk of damage to downstream receiving water, the applicant shall be required to provide regular monitoring of surface water discharge from the site during the project construction or installation. If the project does not meet water quality standards, the City may suspend further development work on the site until such standards are met.
4. The City may require additional mitigation measures in erosion hazard areas, including, but not limited to, the restriction of major soil-disturbing activities associated with site development between October 1st and April 30th to meet the stated purpose contained in SMC [20.240.010](#) and [20.240.210](#).
5. The use of hazardous substances, pesticides, and fertilizers in erosion hazard areas may be prohibited by the City. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.230 Geologic hazard areas – Required buffer areas.**

- A. Buffers for geologic hazard areas shall be maintained as undisturbed native vegetation consistent with SMC [20.240.090](#). Building and other improvement setbacks will be required in addition to buffers as recommended by the qualified professional to allow for landscaping, access around structures for maintenance, and location of stormwater facilities at safe distances from geologic hazard areas where native vegetation is not necessary to reduce the risk of the hazard.
- B. Required buffer widths for geologic hazard areas shall reflect the sensitivity of the hazard area and the risks associated with development and, in those circumstances permitted by these regulations, the type and intensity of human activity and site design proposed to be conducted on or near the area.
- C. In determining the appropriate buffer width, the City shall consider the recommendations contained in a geotechnical critical area report required by these regulations.
- D. For moderate to high risk landslide hazard areas, the qualified professional shall recommend whether buffers should be required and the width of those buffers, as well as recommending any additional setbacks for buildings and stormwater facilities adequate to certify no increase in the risk of the hazard.
- E. For very high risk landslide hazard areas, the standard buffer shall be 50 feet from all edges of the landslide hazard area. Larger buffers may be required as needed to eliminate or minimize the risk to people and property based on a geotechnical critical area report. The standard buffer may be reduced when geotechnical studies demonstrate, and the qualified professional certifies, that the reduction will not increase the risk of hazard to people or property, on or off site; however, the minimum buffer shall be 15 feet.
- F. Landslide hazard areas and associated buffers shall be placed either in a separate tract on which development is prohibited, protected by execution of an easement, dedicated to a conservation organization or

land trust, or similarly preserved through a permanent protective mechanism acceptable to the City. The location and limitations associated with the critical landslide hazard and its buffer shall be shown on the face of the deed or plat applicable to the property and shall be recorded with the King County Recorder's Office. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.240 Geologic hazards – Critical area report requirements.**

A. **Report Required.** If the Director determines that the site of a proposed development includes, is likely to include, or is adjacent to a geologic hazard area, a critical area report shall be required, at the applicant's expense. Critical area report requirements for geologic hazard areas are met through submission to the Director of one or more geologic hazard critical area reports (also referred to as geotech or geotechnical engineering reports). In addition to the general critical areas report requirements of SMC [20.240.080](#), critical areas reports for geologic hazard areas shall meet the requirements of this section. Critical areas reports for two or more types of critical areas shall meet the report requirements for each relevant type of critical area.

B. **Preparation by a Qualified Professional.** Critical areas reports for potential geologic hazard areas shall be prepared, stamped, and signed by a qualified geotechnical engineer or engineering geologist licensed in the State of Washington, with minimum required experience, per SMC 20.20.042, analyzing geologic, hydrologic, and ground water flow systems, and who has experience preparing reports for the relevant type of hazard. If mitigation measures are necessary, the report detailing the mitigation measures and design of the mitigation shall be prepared by a qualified professional with experience stabilizing geologic hazard areas with similar geotechnical properties and by a qualified vegetation ecologist, landscape architect, or arborist with experience designing and monitoring vegetative stabilization of geologic hazard areas.

C. **Third Party Review Required.** Critical areas studies and reports on geologically hazardous areas will be subject to third party review at the owner's sole expense as provided in SMC [20.240.080](#)(C) and in the following circumstances:

1. A buffer reduction or alteration of the critical area or buffer is proposed for very high risk landslide hazard areas.

D. **Minimum Report Contents for Geologic Hazard Areas.** A critical area report for geologic hazard areas shall include a field investigation, contain an assessment of whether or not each type of geologic hazard identified in SMC [20.240.210](#) is present or not present, and determine if the proposed development of the site will increase the risk of the hazard on or off site. The written critical area report(s) and accompanying plan sheet(s) shall contain the following information at a minimum:

1. The minimum report contents required per SMC [20.240.080](#)(E);
2. Documentation of any fieldwork performed on the site, including field data sheets for soils, test pit locations, baseline hydrologic data, site photos, etc.;
3. A description of the methodologies used to conduct the geologic hazard areas delineations,

classifications, hazards assessments, and/or analyses of the proposal impacts, including references;

4. **Site and Construction Plans.** The report shall include a copy of the site plans for the proposal, drawn at an engineering scale, showing:

- a. The type and extent of geologic hazard areas, any other critical areas, and buffers on, adjacent to, off site within 200 feet of, or that are likely to impact or be affected by the proposal;
- b. Proposed development, including the location of existing and proposed structures, fill, significant trees to be removed, vegetation to be removed, storage of materials, and drainage facilities;
- c. The topography, in two-foot contours, of the project area and all hazard areas addressed in the report;
- d. Height of slope, slope gradient, and cross-section of the project area;
- e. The location of springs, seeps, or other surface expressions of ground water on or off site within 200 feet of the project area or that have the potential to affect or be affected by the proposal;
- f. The location and description of surface water on or off site within 200 feet of the project area or that has the potential to be affected by the proposal; and
- g. Clearing limits, including required tree protection consistent with SMC 20.50.370.

5. **Stormwater Pollution Prevention Plan (SWPPP).** For any development proposed with land disturbing activities on a site containing a geologic hazard area, a stormwater pollution prevention plan (also known as an erosion and sediment control plan) shall be required. The SWPPP, in compliance with the requirements of Chapter 13.10 SMC, shall be included in the critical area report or be referenced if it is prepared separately.

6. **Assessment of Geological Characteristics.** The report shall include an assessment of the geologic characteristics of the soils, sediments, and/or rock of the project area and potentially affected adjacent properties, and a review of the site history regarding landslides, erosion, and prior grading. Soils analysis shall be accomplished in accordance with accepted classification systems in use in the region. The assessment shall include, but not be limited to:

- a. A detailed overview of the field investigations, published data, and references; data and conclusions from past assessments of the site; and site-specific measurements, tests, investigations, or studies that support the identification of geologically hazardous areas; and
- b. A summary of the existing site conditions, including:
  - i. Surface topography, existing features, and vegetation found in the project area and in all

hazard areas addressed in the report;

ii. Surface and subsurface geology and soils to sufficient depth based on data from site-specific explorations;

iii. Geologic cross-section(s) displaying the critical design conditions;

iv. Surface and ground water conditions; and

c. A description of the vulnerability of the site to seismic and other geologic events.

7. **Analysis of Proposal.** The report shall contain a hazards analysis including a detailed description of the project, its relationship to the geologic hazard(s), and its potential impact upon the identified hazard area(s), the subject property, and affected adjacent properties. The hazards analysis component of the critical areas report shall include the following based on the type(s) of geologic hazard areas identified:

a. Recommendations for the minimum buffer consistent with SMC [20.240.230](#) and recommended minimum drainage and building setbacks from any geologic hazard based upon the geotechnical analysis. Buffers shall be maintained consistent with SMC [20.240.090](#); however, the qualified professional may recommend additional setbacks for drainage facilities or structures that do not have to be maintained as undisturbed native vegetation; and

b. An analysis of proposed surface and subsurface drainage, and the vulnerability of the site to erosion.

E. **Additional Technical Information Requirements for Landslide Hazard Areas.** The technical information required in a critical area report for a project within a landslide hazard area shall also include the following:

1. An estimate of the present stability of the subject property; the stability of the subject property during construction; the stability of the subject property after all development activities are completed; and a discussion of the relative risks and slide potential relating to adjacent properties during each stage of development, including the effect construction and placement of structures, clearing, grading, and removal of vegetation will have on the slope over the estimated life of the structure;

2. An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a 100-year storm event;

3. Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on downslope properties;

4. A study of slope stability including an analysis of proposed cuts, fills, and other site grading;

5. Compliance with the requirements of SMC [20.240.224](#)(D) for alterations proposed in moderate to high

risk landslide hazard areas;

6. Compliance with the requirements of SMC [20.240.224](#)(E) through (G) for alterations proposed in very high risk landslide hazard areas;
7. Parameters for design of site improvements including appropriate foundations and retaining structures. These should include allowable load and resistance capacities for bearing and lateral loads, installation considerations, and estimates of settlement performance;
8. Recommendations for drainage and subdrainage improvements;
9. Earthwork recommendations including clearing and site preparation criteria, fill placement and compaction criteria, temporary and permanent slope inclinations and protection, and temporary excavation support, if necessary; and
10. Mitigation of adverse site conditions including slope stabilization measures and seismically unstable soils, if appropriate.

**F. Additional Technical Information Requirements for Seismic Hazard Areas.** The technical information required in a critical area report for a project within a seismic hazard area shall also include the following:

1. A complete discussion of the potential impacts of seismic activity on the site (for example, forces generated and fault displacement);
2. Additionally, a geotechnical engineering report for a seismic hazard area shall evaluate the physical properties of the subsurface soils, especially the thickness of unconsolidated deposits and their liquefaction potential. If it is determined that the site is subject to liquefaction, mitigation measures appropriate to the scale of the development shall be recommended and implemented; and
3. Any additional information or analysis necessary to demonstrate compliance with the standards for alteration in seismic hazard areas in SMC [20.240.224](#)(H).

**G. Limited Report Requirements for Stable Erosion Hazard Areas.** When recommended by the qualified professional for sites only overlain by erosion hazard areas with suitable slope stability, and no other type of critical area or buffer, detailed critical areas report requirements may be waived. Report requirements for stable erosion hazard areas may be met through construction documents that shall include at a minimum a stormwater pollution plan prepared in compliance with requirements set forth in Chapter 13.10 SMC.

**H. Mitigation of Long-Term Impacts.** When hazard mitigation is required, the mitigation plan shall specifically address how the activity maintains or reduces the preexisting level of risk to the site and adjacent properties on a long-term basis (equal to or exceeding the projected lifespan of the activity or occupation). Proposed mitigation techniques shall be considered to provide long-term hazard reduction only if such techniques do not require

regular maintenance or other actions to maintain their function. Mitigation may also be required to avoid any increase in risk above the preexisting conditions following abandonment of the activity.

I. **Additional Information.** When appropriate due to the proposed impacts or the project area conditions, the Director may also require the critical area report to include:

1. Where impacts are proposed, mitigation plans consistent with the requirements of SMC [20.240.082](#) and the geologic hazards mitigation performance standards and requirements of SMC [20.240.250](#);
2. A request for consultation with WDFW, the Department of Ecology, local Native American Indian tribes, or other appropriate agency; and
3. Detailed surface and subsurface hydrologic features both on and adjacent to the site. (Ord. 856 § 2 (Exh. B), 2019).

#### **20.240.250 Geologic hazards – Mitigation performance standards and requirements.**

A. **Requirements for Mitigation.** Mitigation is required for proposed adverse impacts and increased risks due to alteration of geologic hazard areas and shall be sufficient to result in no increased risk of the hazard consistent with the development standards in SMC [20.240.224](#). Mitigation plans shall be submitted as part of the required critical area report, consistent with the requirements of SMC [20.240.080](#), [20.240.082](#), and [20.240.240](#), and this section. When revegetation is required as part of the mitigation, then the mitigation plan shall meet the standards of SMC [20.240.350](#)(H), excluding those standards that are wetland specific.

B. **Preference of Mitigation Actions.** Methods to achieve mitigation for alterations of geologic hazard areas shall be approached in the following order of preference:

1. **Protection.** Mitigation measures that increase the protection of the identified geologic hazard areas include, but are not limited to:
  - a. Increased or enhanced buffers;
  - b. Setbacks for permanent and temporary structures;
  - c. Reduced project scope; and
  - d. Retention of existing vegetation.
2. **Restoration.** Restoration of native vegetation.
3. **Engineered Stabilization.** Engineered design of geologic hazard stabilization to ensure no increased risk of the hazard due to the proposal with preference for bioengineering over structural engineered solutions.

C. **Performance Standards.** The following performance standards shall apply to any mitigation for development proposed within geologic hazard areas:

1. Geotechnical studies shall be prepared by a qualified professional to identify and evaluate potential hazards and to formulate mitigation measures;
2. Construction methods will reduce or not adversely affect geologic hazards;
3. Site planning to minimize disruption of existing topography and natural vegetation;
4. Significant trees shall be preserved, unless removal is unavoidable or otherwise allowed under the provisions of this chapter;
5. Minimize impervious surface coverage;
6. Replant disturbed areas as soon as feasible pursuant to an approved landscape plan. When planting is required, the following standards shall apply:
  - a. Native species, indigenous to the region, shall be used in any landscaping of disturbed or undeveloped areas and in any enhancement of habitat or buffers;
  - b. Plant selection shall be consistent with the existing or projected site conditions, including slope aspect, moisture, and shading;
  - c. Plants should be commercially available or available from local sources;
  - d. Plant species high in food and cover value for fish and wildlife shall be used;
  - e. Mostly perennial species should be planted;
  - f. Committing significant areas of the site to species that have questionable potential for successful establishment shall be avoided;
  - g. Plant selection, densities, and placement of plants shall be determined by a qualified professional and shown on the design plans;
  - h. Stockpiling soil and construction materials should be confined to upland areas and contract specifications should limit stockpiling of earthen materials to durations in accordance with City clearing and grading standards, unless otherwise approved by the City;
  - i. Planting instructions shall be submitted which describe placement, diversity, and spacing of seeds, tubers, bulbs, rhizomes, sprigs, plugs, and transplanted stock;



- j. Controlled release fertilizer shall be applied (if required) at the time of planting and afterward only as plant conditions warrant as determined during the monitoring process;
  - k. An irrigation system shall be installed, if necessary, for the initial establishment period; and
  - l. The heterogeneity and structural diversity of vegetation shall be emphasized in landscaping;
7. Clearing and grading regulations as set forth by the City, in SMC 20.50.290 through 20.50.370, shall be followed;
8. The use of retaining walls that allow maintenance of existing natural slope areas is preferred over graded slopes;
9. All construction specifications and methods shall be approved by a qualified professional and the City;
10. Construction management shall be provided by a qualified professional. Ongoing work on site shall be inspected by the City;
11. Site drainage design and temporary erosion and sedimentation controls, pursuant to an approved stormwater pollution prevention plan consistent with the adopted stormwater manual, shall be implemented during and after construction;
12. Undevelopable geologic hazard areas larger than one-half acre shall be placed in a separate tract, provided this requirement does not make the lot nonconforming;
13. A monitoring program shall be prepared for construction activities permitted in geologic hazard areas; and
14. Development shall not increase instability, create a hazard to the site or adjacent properties, or result in a significant increase in sedimentation or erosion and adequate mitigation shall be incorporated into the project design to comply with the requirements of SMC [20.240.224](#) and [20.240.230](#). (Ord. 856 § 2 (Exh. B), 2019).

### **Subchapter 3.**

#### **Fish and Wildlife Habitat Conservation Areas**

##### **20.240.260 Fish and wildlife habitat – Description and purpose.**

A. Fish and wildlife habitat conservation areas (or habitat conservation areas) are lands managed for maintaining populations of species in suitable habitats within their natural geographic distribution so that the habitat available is sufficient to support viable populations over the long term and isolated subpopulations are not created. Fish and wildlife habitat conservation areas include areas with which State and Federal designated threatened, endangered, and sensitive species have a primary association as well as priority species and

habitats listed by WDFW, including corridors that connect priority habitat, and those areas that provide habitat for species of local significance, which have been or may be identified in the City of Shoreline Comprehensive Plan. Fish and wildlife habitat conservation areas also include stream areas and buffers that provide important habitat corridors; help maintain water quality; store and convey stormwater and floodwater; recharge ground water; and serve as areas for recreation, education, scientific study, and aesthetic appreciation.

B. The purpose of fish and wildlife habitat conservation areas shall be to protect and conserve the habitat of fish and wildlife species and thereby maintain or increase their populations. The primary purpose of this section is to minimize development impacts to fish and wildlife habitat conservation areas and to:

1. Protect Federal and State listed habitats and species and give special attention to protection and enhancement of anadromous fish populations; and
2. Maintain a diversity of species and habitat within the City; and
3. Coordinate habitat protection to maintain and provide habitat connections; and
4. Help maintain air and water quality and control erosion. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.270 Fish and wildlife habitat – Classification and designation.**

A. The City designates the following fish and wildlife habitat conservation areas that meet one or more of the criteria in subsection B of this section, regardless of any formal identification, as critical area, and as such, these areas are subject to the provisions of this chapter. These areas shall be managed consistent with best available science, including WDFW's Management Recommendations for Priority Habitat and Species. The following fish and wildlife habitat conservation areas are specifically designated, and this designation does not preclude designation of additional areas as consistent with the criteria in subsection B of this section:

1. All regulated streams and wetlands and their associated buffers as determined by a qualified specialist.
2. The waters, bed, and shoreline of Puget Sound up to the OHWM.

B. Fish and wildlife habitat conservation areas are those areas designated by the City based on review of the best available science; input from WDFW, the Department of Ecology, USACE, and other agencies; and any of the following criteria:

1. **Areas where State or Federally Designated Endangered, Threatened, and Sensitive Species Have a Primary Association.**
  - a. Federally designated endangered and threatened species are those fish and wildlife species identified by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service that are in danger of extinction or threatened to become endangered. The U.S. Fish and Wildlife Service and the

National Marine Fisheries Service should be consulted for current listing status. Federally designated endangered and threatened species known to be identified and mapped by the Washington State Department of Wildlife in Shoreline include, but may not be limited to, the following:

- i. Chinook (*Oncorhynchus tshawytscha*);
- ii. Southern resident orca or killer whales (*Orcinus orca*).

b. State designated endangered, threatened, and sensitive species are those fish and wildlife species native to the State of Washington that are in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a significant portion of their range within the State without cooperative management or removal of threats as identified by WDFW. State designated endangered, threatened, and sensitive species are periodically recorded in WAC 232-12-014 (State endangered species) and WAC 232-12-011 (State threatened and sensitive species), as amended from time to time. WDFW maintains the most current listing and should be consulted for current listing status. State designated endangered, threatened, and sensitive species known to be identified and mapped by WDFW in Shoreline include, but may not be limited to, the following:

- i. Northern goshawk (*Accipiter gentilis*);
- ii. Purple martin (*Progne subis*).

2. **State Priority Habitats and Species.** Priority habitats and species are considered to be priorities for conservation and management. Priority species require protective measures for their perpetuation due to their population status; sensitivity to habitat alteration; and/or recreational, commercial, or tribal importance. Priority habitats are those habitat types or elements with unique or significant value to a diverse assemblage of species. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element. Priority habitats and species are identified by WDFW in the Priority Habitats and Species List. Priority habitats and species known to be identified and mapped by WDFW in Shoreline include, but may not be limited to, the following:

- a. Biodiversity areas and corridors identified and mapped along Boeing Creek and in and around Innis Arden Reserve Park;
- b. Chinook/fall chinook (*Oncorhynchus tshawytscha*);
- c. Coho (*Oncorhynchus kisutch*);
- d. Dungeness crab (*Cancer magister*);
- e. Estuarine intertidal aquatic habitat;

- f. Geoduck (*Panopea abrupta*);
- g. Northern goshawk (*Accipiter gentilis*);
- h. Pacific sand lance (*Ammodytes hexapterus*);
- i. Purple martin (*Progne subis*);
- j. Resident coastal cutthroat (*Oncorhynchus clarki*);
- k. Surf smelt (*Hypomesus pretiosus*); and
- l. Winter steelhead (*Oncorhynchus mykiss*).

3. **Commercial and Recreational Shellfish Areas.** These areas include all public and private tidelands or bedlands suitable for shellfish harvest, including shellfish protection districts established pursuant to Chapter 90.72 RCW, as amended from time to time.

4. **Kelp and Eelgrass Beds and Herring and Smelt Spawning Areas.**

5. **Waters of the State.** Waters of the State include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the State of Washington, as classified in WAC 222-16-030, as amended from time to time. Streams are those areas where surface waters produce a defined channel or bed, not including irrigation ditches, canals, storm or surface water runoff devices, or other entirely artificial watercourses, unless such watercourses are used by fish or are used to convey streams naturally occurring prior to construction. A channel or bed need not contain water year round; provided, that there is evidence of at least intermittent flow during years of normal rainfall. Streams shall be classified in accordance with the DNR water typing system (WAC 222-16-030), hereby adopted in its entirety by reference and summarized as follows:

- a. Type S: streams inventoried as “shorelines of the State” under the SMA and the rules promulgated pursuant to the SMA, as amended from time to time;
- b. Type F: streams that contain fish habitat. Not all streams that are known to exist with fish habitat support anadromous fish populations, or have the potential for anadromous fish occurrence because of obstructions, blockages, or access restrictions resulting from existing conditions. Therefore, in order to provide special consideration of and increased protection for anadromous fish in the application of development standards, shoreline streams shall be further classified as follows:
  - i. **Anadromous Fish-Bearing Streams (Type F-Anadromous).** These streams include:
    - (A) Fish-bearing streams where naturally recurring use by anadromous fish populations has been documented by a government agency;

(B) Streams that are fish passable or have the potential to be fish passable by anadromous populations, including those from Lake Washington or Puget Sound, as determined by a qualified professional based on review of stream flow, gradient and natural barriers (i.e., natural features that exceed jumping height for salmonids), and criteria for fish passability established by WDFW; and

(C) Streams that are planned for restoration in a six-year capital improvement plan adopted by a government agency or planned for removal of the private dams that will result in a fish-passable connection to Lake Washington or Puget Sound; and

ii. **Nonanadromous Fish-Bearing Streams (Type F-Nonanadromous).** These include streams that contain existing or potential fish habitat, but do not have the potential for anadromous fish use due to natural barriers to fish passage, including streams that contain resident or isolated fish populations.

The general areas and stream reaches with access for anadromous fish are indicated in the City of Shoreline Stream and Wetland Inventory and Assessment (2004) and basin plans. The potential for anadromous fish access shall be confirmed in the field by a qualified professional as part of a critical area report;

- c. Type Np: perennial nonfish habitat streams;
- d. Type Ns: seasonal nonfish habitat streams; and
- e. Piped stream segments: those segments of streams, regardless of their type, that are fully enclosed in an underground pipe or culvert. (Ord. 856 § 2 (Exh. B), 2019).

#### **20.240.272 Fish and wildlife habitat – Mapping.**

A. **Mapping.** The approximate location and extent of fish and wildlife habitat areas are shown in the data layers maintained in the City geographic information system (GIS) and shown in Figure 20.230.080. In addition, the following maps and inventories are hereby adopted by reference as amended:

1. WDFW Priority Habitat and Species maps;
2. DNR Official Water Type Reference maps;
3. DNR Puget Sound Intertidal Habitat Inventory maps;
4. DNR Shorezone Inventory;
5. DNR Natural Heritage Program mapping data;

6. Washington State Department of Health Annual Inventory of Shellfish Harvest Areas;
7. Anadromous and resident salmonid distribution maps contained in the Habitat Limiting Factors reports published by the Washington State Conservation Commission; and
8. DNR State Natural Area Preserves and Natural Resource Conservation Area maps.

B. The inventories and cited maps and resources are to be used as a guide for the City, project applicants, and/or property owners, and may be continuously updated as new fish and wildlife habitat conservation areas are identified or critical area reports are submitted for known fish and wildlife habitat conservation areas. The inventories, maps, and resources are a reference and do not provide a final critical area designation. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.274 Fish and wildlife habitat – General development standards.**

A. Development activities and uses shall be prohibited in fish and wildlife habitat conservation areas and associated buffers, except as provided for in this subchapter. Unless allowed under SMC [20.240.040](#), subsection C of this section, or SMC [20.240.276](#), development activities and uses that result in alteration of fish and wildlife habitat conservation areas shall be subject to the shoreline variance provisions of 20.220.040.

B. Any proposed alterations permitted, consistent with shoreline variance review, to fish and wildlife habitat conservation area shall require the preparation of a habitat conservation area mitigation plan (commonly referred to as a habitat management plan) to mitigate for the adverse impacts of the proposal, consistent with the recommendations specific to the habitat or species of the WDFW Priority Habitat Program. The habitat management plan shall be prepared by a qualified professional and reviewed and approved by the City, consistent with the standards for mitigation plans in SMC [20.240.082](#) and [20.240.300](#).

C. **Activities Allowed in Fish and Wildlife Habitat Conservation Areas.** The activities listed below are allowed in fish and wildlife habitat conservation areas pursuant to SMC [20.240.040](#), Allowed activities, and subject to applicable permit approvals. These activities do not require the submission of a critical area report and are exempt from monitoring and financial guarantee requirements, except where such activities result in a loss of the functions and values of a fish and wildlife habitat conservation area. These activities include:

1. Conservation or preservation of soil, water, vegetation, fish, shellfish, and/or other wildlife that does not entail changing the structure or functions of the existing habitat conservation area.
2. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the fish and wildlife habitat conservation area by changing existing topography, water conditions, or water sources.
3. Permitted alteration to a legally constructed structure existing within a fish and wildlife habitat conservation area buffer that does not increase the footprint of the development or hardscape or increase

the impact to a fish and wildlife habitat conservation area, consistent with SMC [20.220.150](#).

4. Clearing, grading, and the construction of fences and arbors are allowed within the required 10-foot stream buffers for a piped stream segment if no other critical area or buffer is present.

D. **Nonindigenous Species.** No plant, wildlife, or fish species not indigenous to the region shall be introduced into a fish and wildlife habitat conservation area unless authorized by a State or Federal permit or approval.

E. **Mitigation and Contiguous Corridors.** Mitigation sites shall be located to preserve or achieve contiguous wildlife habitat corridors in accordance with a mitigation plan that is part of an approved critical area report to minimize the isolating effects of development on habitat areas, so long as mitigation of aquatic habitat is located within the same aquatic ecosystem as the area disturbed.

F. **Approvals of Activities.** The Director shall condition approvals of development activities allowed within or adjacent to a fish and wildlife habitat conservation area, as necessary to minimize or mitigate any potential adverse impacts. Conditions shall be based on the best available science and may include, but are not limited to, the following:

1. Establishment of buffers;
2. Preservation of important vegetation and/or habitat features such as snags and downed wood specific to the priority wildlife species in the fish and wildlife habitat conservation area;
3. Limitation of access to the habitat area, including fencing to deter unauthorized access;
4. Seasonal restriction of construction activities;
5. Establishment of a duration and timetable for periodic review of mitigation activities; and
6. Requirement of a performance bond, when necessary, to ensure completion and success of proposed mitigation.

G. **Mitigation and Equivalent or Greater Shoreline Ecological Functions.** Mitigation of alterations to fish and wildlife habitat conservation areas shall achieve equivalent or greater shoreline ecological, biological, and hydrologic functions and shall include mitigation for adverse impacts upstream from, downstream from, or within the same shoreline reach as the development proposal site. Mitigation shall address each function affected by the alteration to achieve functional equivalency or improvement on a per function basis. Mitigation shall be located on site except when demonstrated that a higher level of ecological functioning would result from an off-site location. Mitigation shall be detailed in a fish and wildlife habitat conservation area mitigation plan, consistent with the requirements of SMC [20.240.300](#).

H. **Approvals and the Best Available Science.** Any approval of alterations or impacts to a fish and wildlife

habitat conservation area shall be supported by the best available science.

**I. Buffers.**

1. **Establishment of Buffers.** The Director shall require the establishment of buffer areas for activities adjacent to fish and wildlife habitat conservation areas in order to protect fish and wildlife habitat conservation areas. Buffers shall consist of an undisturbed area of native vegetation or areas identified for restoration established to protect the integrity, functions, and values of the affected habitat. Required buffer widths shall reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby and shall be consistent with the applicable management recommendations issued by WDFW.

2. **Seasonal Restrictions.** When a species is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply. Larger buffers may be required and activities may be further restricted during the specified season.

3. **Habitat Buffer Averaging.** The Director may allow the recommended fish and wildlife habitat area buffer width to be reduced in accordance with a critical area report, the best available science, and the applicable management recommendations issued by WDFW, only if:

- a. It will not reduce stream or habitat functions;
- b. It will not adversely affect fish and wildlife habitat;
- c. It will provide additional natural resource protection, such as buffer enhancement;
- d. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and
- e. The buffer width is not reduced by more than 25 percent in any location.

**J. Signs and Fencing of Fish and Wildlife Habitat Conservation Areas.**

1. **Temporary Markers.** The outer perimeter of the fish and wildlife habitat conservation area or buffer and the clearing limits identified by an approved permit or authorization shall be marked in the field with temporary "clearing limits" fencing in such a way as to ensure that no unauthorized intrusion will occur. The marking is subject to inspection by the Director prior to the commencement of permitted activities during the preconstruction meeting required under SMC 20.50.330(E). This temporary marking and fencing shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

2. **Permanent Signs.** As a condition of any permit or authorization issued pursuant to this chapter, the



Director may require the applicant to install permanent signs along the boundary of a fish and wildlife habitat conservation area or buffer, when recommended in a critical area report or otherwise required by the provisions of this chapter.

a. Permanent signs shall be made of an enamel-coated metal face and attached to a metal post or another material of equal durability and nonhazardous. Signs shall be posted at an interval of one per lot or every 50 feet, whichever is less, and shall be maintained by the property owner in perpetuity. The signs shall be worded consistent with the text specified in SMC [20.240.110](#) or with alternative language approved by the Director.

b. The provisions of subsection (J)(2)(a) of this section may be modified as necessary to assure protection of sensitive features or wildlife.

3. **Fencing.** Fencing installed as part of a proposed activity or as required in this subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes habitat impacts. Permanent fencing shall be required at the outer edge of the fish and wildlife habitat conservation area buffer under the following circumstances; provided, that the Director may waive this requirement:

a. As part of any development proposal for subdivisions, short plats, multifamily, mixed use, and commercial development where the Director determines that such fencing is necessary to protect the shoreline ecological functions of the fish and wildlife habitat conservation area; provided, that breaks in permanent fencing may be allowed for access to allowed uses (subsection C of this section and SMC [20.240.280\(D\)](#));

b. As part of development proposals for public and private parks where the adjacent proposed use is active recreation and the Director determines that such fencing is necessary to protect the shoreline ecological functions of the fish and wildlife habitat conservation area;

c. When buffer averaging is part of a development proposal; or

d. At the Director's discretion, to protect the shoreline ecological functions of the fish and wildlife habitat conservation area, as demonstrated in a critical area report. If found to be necessary, the Director shall condition any permit or authorization issued pursuant to this chapter to require the applicant to install a permanent fence at the edge of the fish and wildlife habitat conservation area or buffer, when fencing will prevent future impacts to the fish and wildlife habitat conservation area.

e. The applicant shall be required to install a permanent fence around the fish and wildlife habitat conservation area or buffer when domestic grazing animals, only as allowed under SMC 20.40.240, are present or may be introduced on site.

K. **Subdivisions.** The subdivision and short subdivision of land in fish and wildlife habitat conservation areas

and associated buffers are subject to the following:

1. Land that is located wholly within a fish and wildlife habitat conservation area or its buffer may not be subdivided;
2. Land that is located partially within a fish and wildlife habitat conservation area or its buffer may be divided; provided, that the developable portion of each new lot and its access are located outside of the fish and wildlife habitat conservation area or its buffer. The final lots shall each meet the minimum lot size requirements of SMC 20.50.020;
3. Access roads and utilities serving the proposed subdivision may be permitted within the fish and wildlife habitat conservation area and associated buffers only if the applicant's qualified professional(s) demonstrate, and the City determines, that no other feasible alternative exists, all unavoidable impacts are fully mitigated, and the use is consistent with this chapter. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.276 Fish and wildlife habitat – Specific habitat development standards.**

In addition to the provisions in SMC [20.240.274](#), the following development standards apply to the specific habitat types identified below:

**A. Endangered, Threatened, and Sensitive Species.**

1. No development shall be allowed within a fish and wildlife habitat conservation area or buffer with which State or Federally endangered, threatened, or sensitive species have a primary association, except that which is provided for by a management plan established by WDFW or applicable State or Federal agency.
2. Whenever activities are proposed adjacent to a fish and wildlife habitat conservation area with which State or Federally endangered, threatened, or sensitive species have a primary association, such area shall be protected through the application of protection measures in accordance with a critical area report prepared by a qualified professional and approved by the City. Approval for alteration of the fish and wildlife habitat conservation area or its buffer shall not occur prior to consultation with WDFW for animal species, DNR for plant species, and other appropriate Federal or State agencies.

**B. Anadromous Fish.**

1. All activities, uses, and alterations proposed to be located in water bodies used by anadromous fish or in areas that affect such water bodies shall give special consideration to the preservation and enhancement of anadromous fish habitat, including, but not limited to, adhering to the following standards:
  - a. Subsection A of this section applies to anadromous fish where those populations are identified as endangered, threatened, or sensitive species;

- b. Activities shall be timed to occur only during the allowable work window as designated by WDFW for the applicable species;
- c. An alternative alignment or location for the activity is not feasible;
- d. The activity is designed so that it will not degrade the shoreline ecological function of the fish habitat or other critical areas; and
- e. Any impacts to the shoreline ecological function of the fish and wildlife habitat conservation area are mitigated in accordance with an approved critical area report.

2. Structures that prevent migration shall not be allowed in the portion of water bodies currently or historically used by anadromous fish. Fish bypass facilities shall be provided, consistent with RCW 77.57.030, as amended from time to time, that allow the upstream migration of adult fish and prevent fry and juveniles migrating downstream from being trapped or harmed.

3. Fills, when authorized by the City and all applicable joint aquatic resource permit application approvals, shall not adversely impact anadromous fish or their habitat or shall mitigate any unavoidable impacts and shall only be allowed for a water-dependent use.

C. **Wetland Habitats.** All proposed activities within or adjacent to fish and wildlife habitat conservation areas containing wetlands shall conform to the wetland development performance standards set forth in Chapter [20.240](#) SMC, Subchapter 4, Wetlands. If nonwetlands habitat and wetlands are present at the same location, the provisions of this subchapter or the Wetlands subchapter, whichever provides greater protection to the habitat, apply.

D. **Streams.** Activities, uses, and alterations of streams shall be prohibited, subject to the shoreline variance provisions (SMC [20.220.040](#)), unless otherwise allowed by the allowed activities provisions of this chapter. No alteration to a stream buffer shall be permitted unless consistent with the provisions of this chapter and the specific standards for development outlined below.

1. **Type S and Type F-Anadromous Streams.** Development activities and uses that result in alteration of Type S and Type F-anadromous streams and their associated buffers shall be prohibited subject to the shoreline variance provisions of SMC [20.220.040](#).

2. **Type F-Nonanadromous and Type Np Streams.** Development activities and uses that result in alteration of Type F-nonanadromous and Type Np streams are prohibited subject to the shoreline variance provisions of SMC [20.220.040](#).

3. **Type Ns Streams.** Development activities and uses that result in unavoidable impacts may be permitted in Type Ns streams and associated buffers in accordance with an approved critical area(s) report and compensatory mitigation plan, and only if the proposed activity is consistent with the purpose and

intent of the SMA, this Master Program, and this chapter. Full compensation for the loss of acreage and functions of streams and buffers shall be provided in compliance with the mitigation performance standards and requirements of these regulations.

4. **Stream Crossing.** Crossing of streams may be permitted based on the findings in a critical area report, subject to the limitations in subsections (D)(1), (2), and (3) of this section, and consistent with the following:

- a. **Bridges.** Bridges shall be used to cross Type S and Type F-anadromous streams. Culverted crossings and other obstructive means of crossing Type S and Type F-anadromous streams shall be prohibited; and
- b. **Culverts.** Culverts are allowed for crossing of Type F-nonanadromous, Np, and Ns streams when fish passage will not be impaired and when the following design criteria and conditions are met:
  - i. Oversized culverts, which allow for fish passage and floodplain or wetland connectivity, will be installed;
  - ii. Culverts for Type F streams shall be designed for fish passage that will allow natural stream functions and processes to occur (i.e., sediment, wood, and debris transport) where appropriate;
  - iii. Gravel substrate will be placed in the bottom of the culvert to a minimum depth of one foot for Type F streams;
  - iv. A maintenance covenant shall be recorded on title with King County that requires the property owner to, at all times, keep any culvert free of debris and sediment to allow free passage of water and, if applicable, fish; and
  - v. The City may require that a culvert be removed from a stream as a condition of approval, unless it is demonstrated conclusively that the culvert is not detrimental to fish habitat or water quality, or removal would be detrimental to fish or wildlife habitat or water quality.

5. **Relocation.** Relocation of a Type S, F, or Np stream may be allowed, subject to the limitations in subsections (D)(1) and (2) of this section, and only when the proposed relocation is part of an approved mitigation or rehabilitation plan, will result in equal or better habitat and water quality, and will not diminish the flow capacity of the stream. Relocation of a Type Ns stream may be allowed, subject to the limitation in subsection (D)(3) of this section, and only when the proposed relocation will result in equal or better habitat and water quality and will not diminish the flow capacity of the stream.

6. **Restoring Piped Watercourses.** The City allows the voluntary opening of previously channelized/culverted streams and the rehabilitation and restoration of streams. Restoring piped watercourses may be approved, consistent with the following:

- a. When piped watercourse sections are restored, a protective buffer shall be required of the stream section. The buffer distance shall be consistent with the buffer relief that may be granted consistent with SMC [20.240.056](#), Shoreline restoration projects. The stream and buffer area shall include habitat improvements and measures to prevent erosion, landslide, and water quality impacts. Opened channels shall be designed to support fish and wildlife habitat and uninhibited fish access, unless determined to be unfeasible as demonstrated in a restoration plan reviewed and approved by the City;
- b. Removal of pipes conveying streams shall only occur when the City determines that the proposal will result in an improvement of water quality and ecological functions and will not significantly increase the threat of erosion, flooding, slope stability, or other hazards; and
- c. Where the buffer of the restored stream would extend onto an adjacent property, the applicant shall obtain a written agreement from the affected neighboring property owner prior to the City approving the restoration of the piped watercourse.

E. **Priority Species.** Fish and wildlife habitat conservation areas or buffers with priority species shall be subject to the following:

1. Development activities and uses that result in unavoidable impacts may be permitted in priority species habitat areas and associated buffers in accordance with an approved critical area(s) report and habitat management plan, only if the proposed activity is consistent with the purpose and intent of the SMA, this Master Program, and this chapter. Full compensation for the loss of acreage and functions of habitat and buffer areas shall be provided in compliance with the mitigation performance standards and requirements of these regulations. (Ord. 856 § 2 (Exh. B), 2019).

#### **20.240.280 Fish and wildlife habitat – Required buffer areas.**

- A. Buffer widths for fish and wildlife habitat areas shall be based on consideration of the following factors: species-specific recommendations of WDFW; recommendations contained in a habitat management plan submitted by a qualified professional; and the nature and intensity of land uses and activities occurring on the land adjacent to the site.
- B. Low-impact uses and activities that are consistent with the purpose and function of the habitat buffer and do not detract from its integrity may be permitted within the buffer depending on the sensitivity of the habitat area. Examples of uses and activities which may be permitted in appropriate cases include trails that are pervious, viewing platforms, low impact stormwater management facilities such as bioswales and other similar uses and activities; provided, that any impacts to the buffer resulting from such permitted facilities shall be fully mitigated.
- C. **Standard Required Stream Buffer Widths.** Buffer widths shall reflect the sensitivity of the stream type, the risks associated with development and, in those circumstances permitted by these regulations, the type and intensity of human activity and site design proposed to be conducted on or near the stream area. Stream buffers shall be measured from the OHWM or the top of the bank, if the OHWM cannot be determined. Buffers shall be

measured with rounded ends where streams enter or exit piped segments.

1. The following buffers are established for streams based upon the DNR water typing system and further classification based on anadromous or nonanadromous fish presence for the Type F streams:

**Table 20.240.280(1)**

<b>Stream Type</b>	<b>Standard Buffer Width (ft)</b>
Type S	150
Type F-anadromous	115
Type F-nonanadromous	75
Type Np	65
Type Ns	45
Piped Stream Segments	10

2. **Increased Stream Buffer Widths.** The recommended stream buffer widths shall be increased, as follows:

- a. When the qualified professional determines that the recommended width is insufficient to prevent habitat degradation and to protect the structure and functions of the habitat area;
- b. When the flood hazard area exceeds the recommended stream buffer width, the stream buffer area shall extend to the outer edge of the flood hazard area;
- c. When a channel migration zone is present, the stream buffer width shall be measured from the outer edge of the channel migration zone;
- d. When the habitat area is in an area of high blowdown potential, the stream buffer width shall be expanded an additional 50 feet on the windward side; or
- e. When the habitat area is within an erosion or landslide hazard area, or buffer, the stream buffer width shall be the recommended distance, or the erosion or landslide hazard area or buffer, whichever is greater.

3. **Stream Buffer Width Averaging with Enhancement.** The Director may allow the recommended stream buffer width to be reduced in accordance with an approved critical area report and the best available science, on a case-by-case basis, by averaging buffer widths. Any allowance for averaging buffer widths shall only be granted based on the development and implementation of a buffer enhancement plan for areas of buffer degradation, consistent with the provisions in subsection (C)(4) of this section. Only those

portions of the stream buffer existing within the project area or subject parcel shall be considered in the total buffer area for buffer averaging. Averaging of buffer widths may only be allowed where a qualified professional demonstrates that:

- a. The width reduction and buffer enhancement plan provides evidence that the stream or habitat functions, including those of nonfish habitat and riparian wildlife, will be:
  - i. Increased or maintained through plan implementation for those streams where existing buffer vegetation is generally intact native vegetation; or
  - ii. Increased through plan implementation for those streams where existing buffer vegetation is inadequate to protect the functions and values of the stream;
- b. The total area contained in the buffer area of each stream on the development proposal site is not decreased after averaging;
- c. The recommended riparian habitat area width is not reduced by more than 25 percent in any one location; and
- d. The width reduction will not be located within another critical area or associated buffer.

4. **Stream Buffer Enhancement Measures.** The measures determined most applicable and/or appropriate will be considered in buffer averaging requirements. These include but are not limited to:

- a. Removal of fish barriers to restore accessibility to fish.
- b. Enhancement of fish habitat using log structures incorporated as part of a fish habitat enhancement plan.
- c. Enhancement of fish and wildlife habitat structures that are likely to be used by wildlife, including wood duck houses, bat boxes, nesting platforms, snags, rootwads/stumps, birdhouses, and heron nesting areas.
- d. Additional enhancement measures may include:
  - i. Planting native vegetation within the buffer area, especially vegetation that would increase value for fish and wildlife, increase stream bank or slope stability, improve water quality, or provide aesthetic/recreational value; or
  - ii. Creation of a surface channel where a stream was previously underground, in a culvert or pipe. Surface channels that are “daylighted” shall be located within a buffer area and shall be designed with energy dissipating functions or channel roughness features such as meanders and rootwads to reduce future bank failures or nearby flooding; or

iii. Removal or modification of existing stream culverts (such as at road crossings) to improve fish passage, stream habitat, and flow capabilities; or

iv. Upgrading of retention/detention facilities or other drainage facilities beyond required levels.

D. **Stream Buffer Allowed Uses and Alteration.** Activities and uses shall be prohibited in stream buffers, except as provided for in this chapter. Stream buffers shall be maintained as undisturbed or restored natural vegetation. No clearing or grading activities are allowed within required stream buffers except as allowed under SMC [20.240.040](#), [20.240.274](#), and WAC 173-27-040, as amended from time to time, or consistent with an approved buffer enhancement plan consistent with the provisions of this subchapter. No structures or improvements shall be permitted within the stream buffer area, including buildings, decks, and docks, except as otherwise permitted or required under the SMA, this Master Program, and this chapter, or under one of the following circumstances:

1. **Approved Mitigation.** When the improvements are part of an approved rehabilitation or mitigation plan; or
2. **Trails.** Construction of trails over and in the buffer of piped stream segments, and the construction of trails near other stream segments, consistent with the following criteria:
  - a. Trails should be constructed of pervious surface, with preference for natural materials. Raised boardwalks utilizing nontreated pilings may be acceptable;
  - b. Trails shall be designed in a manner that minimizes impact on the stream system;
  - c. Trails shall have a maximum trail corridor width of five feet; and
  - d. Trails should be located within the outer 25 percent of the buffer, i.e., that portion of the buffer that is farther away from the stream and located to avoid removal of significant trees; or
3. **Footbridges.** Construction of footbridges that minimize the impact to the stream system; or
4. **Informational Signs.** Construction and placement of informational signs or educational demonstration facilities limited to no more than one square yard surface area and four feet high, provided there is no permanent infringement on stream flow; or
5. **Stormwater Management Facilities.** Establishment of low impact stormwater management facilities, such as stormwater dispersion outfalls and bioswales, may be allowed within stream buffers consistent with the adopted stormwater manual; provided, that:
  - a. No other location is feasible;



- b. Pipes and conveyance facilities only in the outer 25 percent of the standard buffer area as set forth in Table 20.240.280(1);
- c. Stormwater dispersion outfalls, bioswales, bioretention facilities, and other low impact facilities consistent with the adopted stormwater manual may be allowed anywhere within stream buffers when determined by a qualified professional that the location of the facility will enhance the buffer area and protect the stream; and
- d. Such facilities are designed consistent with the requirements of SMC 20.70.330; or

**6. Development Proposals within Physically Separated and Functionally Isolated Stream Buffers.**

Consistent with the definition of “buffers” (SMC 20.20.012), areas that are functionally isolated and physically separated from stream due to existing, legally established roadways and railroads, or other legally established structures or paved areas eight feet or more in width that occur between the area in question and the stream shall be considered physically isolated and functionally separated stream buffers. Once determined by the Director, based on a submitted critical area report, to be a physically separated and functionally isolated stream buffer, development proposals shall be allowed in these areas. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.290 Fish and wildlife habitat – Critical area report requirements.**

A. **Report Required.** If the Director determines that the site of a proposed development includes, is likely to include, or is adjacent to a fish and wildlife habitat conservation area, a critical area report shall be required. Critical area report requirements for fish and wildlife habitat conservation areas are generally met through submission to the Director of one or more fish and wildlife habitat critical area reports. In addition to the general critical area report requirements of SMC [20.240.080](#), critical area reports for fish and wildlife habitat conservation areas shall meet the requirements of this section. Critical area reports for two or more types of critical areas shall meet the report requirements for each relevant type of critical area.

B. **Preparation by a Qualified Professional.** Critical areas reports for a habitat conservation area shall be prepared and signed by a qualified professional who is a biologist, ecologist, or other scientist with the minimum required experience, per SMC 20.20.042, related to the specific type(s) of fish and wildlife habitats identified.

C. **Third Party Review Required.** Critical areas studies and reports on fish and wildlife habitat conservation areas shall be, at the applicant’s sole expense, subject to third party review, consistent with SMC [20.240.080](#)(C), and in any of the additional following circumstances:

- 1. Mitigation is required for impacts to Type S, Type F, or Type Np streams and/or buffers; or
- 2. Mitigation is required for impacts to Type Ns streams.

D. **Minimum Report Contents for Fish and Wildlife Habitat Conservation Areas.** The critical area written report(s) and accompanying plan sheet(s) shall contain the following information at a minimum:

1. The minimum report contents required per SMC [20.240.080](#)(E);
2. Documentation of any fieldwork performed on the site, including field data sheets for delineations, water typing and other habitat conservation area classification, baseline hydrologic data, site photos, etc.;
3. A description of the methodologies used to conduct the delineations, classifications, or impact analyses, including reference;
4. **Site Plans.** A copy of the site plan sheet(s) for the project shall be included with the written report and shall include, at a minimum:
  - a. Maps (to scale) depicting delineated and surveyed fish and wildlife habitat conservation areas and required buffers on site, including buffers for off-site critical areas that extend onto the project site; the development proposal; other critical areas; clearing and grading limits; areas of proposed impacts to fish and wildlife habitat conservation areas and/or buffers (include square footage estimates); and
  - b. A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into the buffers of any critical areas. The written report shall contain a discussion of the potential impacts to the fish and wildlife habitat conservation areas associated with anticipated hydroperiod alterations from the project;
5. **Habitat Assessment.** A habitat assessment is an investigation of the project area to evaluate the potential presence or absence of designated critical fish or wildlife species or habitat. A critical area report for a fish and wildlife habitat conservation area shall contain an assessment of habitats including the following site- and proposal-related information at a minimum:
  - a. Detailed description of vegetation on and adjacent to the project area and its associated buffer;
  - b. Identification of any species of local importance, priority species, or endangered, threatened, sensitive, or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;
  - c. A discussion of any Federal, State, or local special management recommendations, including WDFW habitat management recommendations, that have been developed for species or habitats located on or adjacent to the project area;
  - d. A detailed discussion of the direct and indirect potential impacts on habitat by the project, including potential impacts to water quality;
  - e. A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the current proposed land use activity and to be conducted in accordance with SMC [20.240.053](#);

- f. A discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring and maintenance programs; and

6. **Additional Technical Information Requirements for Streams.** Critical area reports for streams shall be consistent with the specific development standards for streams in SMC [20.240.276](#) and [20.240.280](#) and may be met through submission of one or more specific report types. If stream buffer enhancement is proposed to average stream buffer width, a stream buffer enhancement plan shall be submitted in addition to other critical area report requirements of this section. If no project impacts are anticipated and standard stream buffer widths are retained, a stream delineation report, general critical areas report or other reports, alone or in combination, may be submitted as consistent with the specific requirements of this section. In addition to the basic critical area report requirements for fish and wildlife habitat conservation areas provided in subsections A through C of this section, technical information on streams shall include the following information at a minimum:

- a. A written assessment and accompanying maps of the stream and associated hydrologic features on and off site within 200 feet of the project area, including the following information at a minimum:
  - i. Stream survey showing the field delineated OHWM(s);
  - ii. Standard stream buffer boundary;
  - iii. Boundary for proposed stream buffers averaging, if applicable;
  - iv. Vegetative, faunal, and hydrologic characteristics;
  - v. Soil and substrate conditions; and
  - vi. Topographic elevations, at two-foot contours;
- b. A detailed description and functional assessment of the stream buffer under existing conditions pertaining to the protection of stream functions, fish habitat and, in particular, potential anadromous fisheries;
- c. A habitat and native vegetation conservation strategy that addresses methods to protect and enhance on-site habitat and stream functions;
- d. Proposed buffer enhancement, if needed, including a written assessment and accompanying maps and planting plans for buffer areas to be enhanced, including the following information at a minimum:
  - i. A description of existing buffer conditions;
  - ii. A description of proposed buffer conditions and how proposed conditions will increase buffer

functions in terms of stream and fish habitat protection;

iii. Performance standards for measuring enhancement success through a monitoring period of at least five years; and

iv. Provisions for monitoring and submission of monitoring reports documenting buffer conditions, as compared to performance standards, for enhancement success;

e. A discussion of ongoing management practices that will protect the shoreline ecological function of the stream through maintenance of vegetation density within the stream buffer.

E. **Additional Information.** When appropriate due to the type of habitat or species present or the project area conditions, the Director may also require the critical area report to include:

1. Where impacts are proposed, mitigation plans consistent with the requirements of SMC [20.240.082](#) and the fish and wildlife habitat mitigation performance standards and requirements of SMC [20.240.300](#);

2. Third party review to include any recommendations as appropriate by a qualified professional, under contract with or employed by the City, may be required at the applicant's expense of the critical area report analysis and the effectiveness of any proposed mitigating measures or programs;

3. A request for consultation with WDFW, the Department of Ecology, local Native American Indian tribes or other appropriate agency;

4. Copies of the joint aquatic resource permit application (JARPA) and related approvals, such as a hydraulic project approval (HPA) from the DFW, when applicable to the project; and

5. Detailed surface and subsurface hydrologic features both on and adjacent to the site. (Ord. 856 § 2 (Exh. B), 2019).

#### **20.240.300 Fish and wildlife habitat – Mitigation performance standards and requirements.**

A. **Requirements for Mitigation.** Where impacts cannot be avoided, and the applicant has exhausted all feasible design alternatives, the applicant or property owner shall seek to implement other appropriate mitigation actions in compliance with the intent, standards, and criteria of this section. Mitigation provisions shall be applied through the shoreline variance provisions in SMC [20.220.040](#), unless mitigated alterations are specifically allowed by the provisions of this subchapter. In an individual case, these actions may include consideration of alternative site plans and layouts, reductions in the density or scope of the proposal, and/or implementation of the performance standards listed in this section.

B. **Additional Requirements for Stream Mitigation.** Significant adverse impacts to the shoreline ecological function of the stream area shall be mitigated. Mitigation actions shall be implemented in the preferred sequence: avoidance, minimization, restoration, and replacement. Proposals that include less preferred and/or

compensatory mitigation shall demonstrate that:

1. All feasible and reasonable measures will be taken to reduce impacts and losses to the stream, or to avoid impacts where avoidance is required by these regulations;
2. The restored, created, or enhanced stream area or buffer will be available and persistent as the stream or buffer area it replaces; and
3. No overall net loss will occur in the shoreline ecological functions of the stream.

C. **Compensating for Lost or Impacted Functions.** Mitigation of alterations to fish and wildlife habitat shall achieve equivalent or greater shoreline ecological, biological, and hydrologic functions and shall include mitigation for adverse impacts upstream or downstream of the development proposal site on a per function basis. Mitigation shall be located on site except when demonstrated that a higher level of ecological functioning would result from an off-site location. A mitigation plan may include the following:

1. Native vegetation planting plan;
2. Retention, enhancement, or restoration plan of specific habitat features;
3. Plans for control of nonnative invasive plant or wildlife species; and
4. Stipulations for use of innovative, sustainable building practices.

D. **Preference of Mitigation Actions.** Methods to achieve compensation for the shoreline ecological function of fish and wildlife habitat shall be approached in the following order of preference:

1. **Protection.** Mitigation measures that increase the protection of the identified fish and wildlife habitat conservation areas may include but are not limited to:
  - a. Increased or enhanced buffers;
  - b. Setbacks for permanent and temporary structures;
  - c. Reduced project scope;
  - d. Limitations on construction hours;
  - e. Limitations on hours of operation; and/or
  - f. Relocation of access.
2. **Restoration.** Restoration of degraded habitat.

3. **Creation.** Creation (establishment) of wildlife habitat on disturbed upland sites such as those with vegetative cover consisting primarily of nonnative species. This should be attempted only when the site conditions are conducive to the habitat type that is anticipated in the design.
4. **Enhancement.** Enhancement of significantly degraded habitat in combination with restoration or creation. Enhancement alone will result in a loss of habitat acreage and is less effective at replacing the functions lost. Enhancement should be part of a mitigation package that includes replacing the impacted area and meeting appropriate ratio requirements.
5. **Preservation.** Preservation of high-quality, at-risk fish and wildlife habitat as compensation is generally acceptable when done in combination with restoration, creation, or enhancement; provided, that a minimum of 1:1 acreage replacement is provided by reestablishment or creation. Preservation of high-quality, at-risk fish and wildlife habitat may be considered as the sole means of compensation for habitat impacts when the following criteria are met:
  - a. Habitat impacts will not have a significant adverse impact on habitat for listed fish, or other ESA-listed species;
  - b. There is no net loss of habitat functions and values within the watershed or basin;
  - c. The impact area is small (generally less than one-half acre) and/or impacts are occurring to a low-functioning system; and
  - d. All preservation sites shall include buffer areas adequate to protect the habitat and its functions and values from encroachment and degradation.

**E. Location and Timing of Stream Mitigation.**

1. Mitigation shall be provided on site, unless on-site mitigation is not scientifically feasible due to the physical features of the property. The burden of proof shall be on the applicant to demonstrate that mitigation cannot be provided on site.
2. When mitigation cannot be provided on site, mitigation shall be provided in the immediate vicinity of the permitted activity on property owned or controlled by the applicant, such as an easement, provided such mitigation is beneficial to the fish and wildlife habitat conservation area and associated resources. It is the responsibility of the applicant to obtain title to off-site mitigation areas. Mitigation may be considered on City-owned property, or on similar publicly owned property for which title is not available, through a City mitigation program if programmatic mitigation areas have been identified by the City.
3. In-kind mitigation shall be provided, except when the applicant demonstrates and the City concurs that greater functional and habitat value can be achieved through out-of-kind mitigation.

4. Only when it is determined by the City that subsections (B)(1), (2), and (3) of this section are inappropriate and impractical shall off-site, in-kind mitigation or off-site, out-of-kind mitigation be considered.
5. When stream mitigation is permitted by this chapter on site or off site, the mitigation project shall occur near an adequate water supply (stream, ground water) with a hydrologic connection to the mitigation area to ensure successful development or restoration.
6. Any agreed-upon mitigation proposal shall be completed prior to project construction, unless a phased schedule that assures completion concurrent with project construction has been approved by the City.
7. Restored or created streams, where permitted by this chapter, shall be an equivalent or higher stream value or function than the altered stream.

F. **Performance Standards.** The following mitigation measures shall be reflected in fish and wildlife habitat conservation area mitigation planning:

1. The maintenance and protection of habitat functions and values shall be considered a priority in site planning and design;
2. Buildings and structures shall be located in a manner that preserves and minimizes adverse impacts to important habitat areas. This may include clustering buildings and locating fences outside of habitat areas;
3. Retained habitat shall be integrated into open space and landscaping;
4. Where possible, habitat and vegetated open space shall be consolidated in contiguous blocks;
5. Habitat shall be located contiguous to other habitat areas, open space, or landscaped areas, both on and off site, to contribute to a continuous system or corridor that provides connections to adjacent habitat areas;
6. When planting is required, the following standards shall apply:
  - a. Native species, indigenous to the region, shall be used in any landscaping of disturbed or undeveloped areas and in any enhancement of habitat or buffers;
  - b. Plant selection shall be consistent with the existing or projected site conditions, including slope aspect, moisture, and shading;
  - c. Plants should be commercially available or available from local sources;
  - d. Plant species high in food and cover value for fish and wildlife shall be used;

- e. Mostly perennial species should be planted;
  - f. Committing significant areas of the site to species that have questionable potential for successful establishment shall be avoided;
  - g. Plant selection, densities, and placement of plants shall be determined by a qualified professional and shown on the design plans;
  - h. Stockpiling soil and construction materials should be confined to upland areas and contract specifications should limit stockpiling of earthen materials to durations in accordance with City clearing and grading standards, unless otherwise approved by the City;
  - i. Planting instructions shall be submitted which describe placement, diversity, and spacing of seeds, tubers, bulbs, rhizomes, sprigs, plugs, and transplanted stock;
  - j. Controlled release fertilizer shall be applied (if required) at the time of planting and afterward only as plant conditions warrant as determined during the monitoring process;
  - k. An irrigation system shall be installed, if necessary, for the initial establishment period;
  - l. The heterogeneity and structural diversity of vegetation shall be emphasized in landscaping; and
  - m. Significant trees shall be preserved;
7. All construction specifications and methods shall be approved by a qualified professional and the City; and
8. Construction management shall be provided by a qualified professional. Ongoing work on site shall be inspected by the City.

G. **Mitigation Plan.** Mitigation plans shall be submitted as part of the required critical area report consistent with the requirements of SMC [20.240.080](#), [20.240.082](#), and [20.240.290](#) and this section. When revegetation is required as part of the mitigation, then the mitigation plan shall meet the standards of SMC [20.240.350\(H\)](#), excluding those standards that are wetland specific.

H. **Monitoring Program and Contingency Plan.** A monitoring program shall be implemented by the applicant to determine the success of the mitigation project and any necessary corrective actions. This program shall determine if the original goals and objectives are being met. The monitoring program will be established consistent with the guidelines contained in SMC [20.240.082\(D\)](#). (Ord. 856 § 2 (Exh. B), 2019).

#### **Subchapter 4.**

#### **Wetlands**



**20.240.310 Wetlands – Purpose.**

- A. Wetlands help to maintain water quality; store and convey stormwater and floodwater; recharge ground water; provide important fish and wildlife habitat; and serve as areas for recreation, education, scientific study and aesthetic appreciation.
- B. The City's overall goal shall be to achieve no net loss of wetlands. This goal shall be implemented through retention of the function, value, and acreage of wetlands within the City. Wetland buffers serve to moderate runoff volume and flow rates; reduce sediment, chemical nutrient, and toxic pollutants; provide shading to maintain desirable water temperatures; provide habitat for wildlife; protect wetland resources from harmful intrusion; and generally preserve the ecological integrity of the wetland area.
- C. The primary purpose of the wetland regulations is to avoid detrimental wetland impacts and achieve a goal of no net loss of wetland function, value and acreage, and, where possible, enhance and restore wetlands. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.320 Wetlands – Designation and rating.**

- A. **Designation.** All areas meeting the definition of a wetland and identification criteria as wetlands pursuant to SMC [20.240.322](#), regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this chapter.
- B. **Rating.** All wetlands shall be rated by a qualified professional according to the current Department of Ecology wetland rating system, as set forth in the Washington State Wetland Rating System for Western Washington 2014 (Department of Ecology Publication No. 014-06-029, or as revised). Wetland rating categories shall be applied as the wetland exists on the date of adoption of the rating system by the City, as the wetland naturally changes thereafter, or as the wetland changes in accordance with permitted activities.
1. Category I. Category I wetlands are those that represent unique or rare wetland types, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime, or provide a high level of functions. The following types of wetlands are Category I:
    - a. Relatively undisturbed estuarine wetlands larger than one acre;
    - b. Wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR;
    - c. Bogs;
    - d. Mature and old-growth forested wetlands larger than one acre;
    - e. Wetlands in coastal lagoons; and

f. Wetlands that perform many functions well (scoring 23 points or more based on functions).

2. **Category II.** Category II wetlands are those that are difficult, though not impossible, to replace and provide high levels of some functions. The following types of wetlands are Category II:

- a. Estuarine wetlands smaller than one acre, or disturbed estuarine wetlands larger than one acre;
- b. Interdunal wetlands larger than one acre or those found in a mosaic of wetlands; and
- c. Wetlands with a moderately high level of functions (scoring between 20 and 22 points).

3. **Category III.** Category III wetlands are those with a moderate level of functions, generally have been disturbed in some ways, can often be adequately replaced with a well-planned mitigation project, and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands. The following types of wetlands are Category III:

- a. Wetlands with a moderate level of functions (scoring between 16 and 19 points); or
- b. Interdunal wetlands between 0.1 and one acre.

4. **Category IV.** Category IV wetlands are those with the lowest levels of functions (scoring below 16 points) and are often heavily disturbed. These are wetlands that should be able to be replaced, or in some cases improved. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and also need to be protected.

C. **Illegal Modifications.** Wetland rating categories shall not change due to illegal modifications or alterations. A wetland's category shall be based on the premodification/alteration analysis of the wetland.

D. At the time of adoption of the critical area amendments to this Master Program, through Ordinance No. 856, there were no identified Category I wetlands identified within the City. If this category of wetland is subsequently identified, any applicable standards may temporarily be used on an interim basis by the Director based on Washington State guidance on protection of the identified type of resource until such time as permanent shoreline regulations can be established. (Ord. 856 § 2 (Exh. B), 2019).

#### **20.240.322 Wetlands – Mapping and delineation.**

A. **Mapping.** The approximate location and extent of wetlands are shown in the wetland data layer maintained in the City geographic information system (GIS) and shown in Figure 20.230.080. In addition, the following maps and inventories are hereby adopted by reference as amended:

- 1. City of Shoreline, Basin Characterization Reports and Stream and Wetland Inventory and Assessment, Tetra Tech (May 2004);
- 2. City stormwater basin plans as completed and updated;

3. Soils maps produced by the USDA National Resources Conservation Service; and
4. The National Wetlands Inventory, produced by the U.S. Fish and Wildlife Service.

B. **Reference Only.** The inventories and cited resources are to be used as a guide for the City, project applicants, and/or property owners, and may be continuously updated as new wetlands are identified or critical area reports are submitted for known wetlands. These inventories and cited resources are a reference and do not provide a final critical area designation.

C. **Identification and Delineation.** Identification of wetlands and delineation of their boundaries pursuant to this chapter shall be done in accordance with the approved Federal Wetland Delineation Manual and applicable regional supplements per WAC 173-22-035, as amended from time to time. The exact location of a wetland's boundary shall be determined through the performance of a field investigation by a qualified professional. Wetland delineations are valid for five years; after such date the Director shall determine whether a revision or additional assessment is necessary.

D. **Preassessment.** To facilitate long-range planning using a landscape approach, the Director may identify and preassess wetlands using the rating system and establish appropriate wetland buffer widths for such wetlands. The Director will prepare maps of wetlands that have been preassessed in this manner. (Ord. 856 § 2 (Exh. B), 2019).

#### **20.240.324 Wetlands – Development standards.**

A. Activities and uses shall be prohibited in wetlands and wetland buffers, except as provided for in this chapter.

B. **Activities Allowed in Wetlands.** The activities listed below are allowed in wetlands pursuant to SMC [20.240.040](#), Allowed activities, and subject to applicable permit approvals. These activities do not require submission of a critical area report, except where such activities result in a net loss of the shoreline ecological function provided by a wetland or wetland buffer. These activities include:

1. Conservation or preservation of soil, water, vegetation, fish, shellfish, and/or other wildlife that does not entail changing the structure or functions of the existing wetland.
2. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.
3. Drilling for utilities/utility corridors under a wetland, with entrance/exit portals located completely outside of the wetland buffer; provided, that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water

down through the soil column will be disturbed.

4. Enhancement of a wetland through the select removal of nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand labor and handheld equipment unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. Not more than 500 square feet of area may be cleared, as calculated cumulatively over one year, on private property without a permit. All removed plant material shall be taken away from the site and disposed of appropriately. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds or the King County Noxious Weed List shall be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.

5. Permitted alteration to a legally constructed structure existing within a wetland or wetland buffer that does not increase the footprint of the development or hardscape or increase the impact to a wetland or wetland buffer, consistent with SMC [20.220.150](#).

C. **Category I Wetlands.** Development activities and uses that result in alteration of Category I wetlands and their associated buffers shall be prohibited subject to the shoreline variance provisions of SMC [20.220.040](#).

D. **Category II, III and IV Wetlands.** Development activities and uses that result in alteration of Category II, III and IV wetlands shall be prohibited subject to the shoreline variance provisions of SMC [20.220.040](#) and the following criteria:

1. The basic project proposed cannot reasonably be accomplished on another site or sites in the general region while still successfully avoiding or resulting in less adverse impact on a wetland;
2. All on-site alternative designs that would avoid or result in less adverse impact on a wetland or its buffer, such as a reduction to the size, scope, configuration, or density of the project, are not feasible; and
3. Full compensation for the loss of acreage and functions and values of wetland and buffers due to unavoidable impacts shall be provided in compliance with the mitigation performance standards and requirements of this chapter.

E. **Subdivisions.** The subdivision and/or short subdivision of land in wetlands and associated buffers are subject to the following:

1. Land that is located wholly within a wetland and/or its buffer may not be subdivided; and
2. Land that is located partially within a wetland and/or its buffer may be subdivided; provided, that an accessible and contiguous portion of each new lot is:
  - a. Located outside of the wetland and its buffer; and

- b. Meets the minimum lot size requirements of SMC 20.50.020. (Ord. 856 § 2 (Exh. B), 2019).

### **20.240.330 Wetlands – Required buffer areas.**

A. **Buffer Requirements.** The standard buffer widths in Table 20.240.330(A)(1) have been established in accordance with the best available science. The buffer widths shall be determined based on the category of wetland and the habitat score as assigned by a qualified wetland professional using the Washington State Wetland Rating System for Western Washington.

1. The use of the standard buffer widths requires the implementation of the mitigation measures in Table 20.240.330(A)(2), where applicable to the development type, to minimize the impacts of the adjacent land uses.
2. If an applicant chooses not to apply the appropriate mitigation measures in Table 20.240.330(A)(2), then a 33 percent increase in the width of all buffers is required. For example, a 75-foot buffer with the mitigation measures would be a 100-foot buffer without them.
3. The standard buffer widths assume that the buffer is a relatively intact native plant community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. If the existing buffer is bare ground, sparsely vegetated, or vegetated with nonnative or invasive species that do not perform needed functions, then the applicant shall either develop and implement a wetland buffer restoration or enhancement plan to maintain the standard width to create the appropriate plant community or the buffer shall be widened to ensure that adequate functions of the buffer are provided.

**Table 20.240.330(A)(1) Wetland Buffer Requirements**

<b>Wetland Category</b>	<b>Buffer Width According to Habitat Score</b>			
	<b>Habitat Score of 3 – 4</b>	<b>Habitat Score of 5</b>	<b>Habitat Score of 6 – 7</b>	<b>Habitat Score of 8 – 9</b>
Category I: Based on total score or forested	75 ft.	105 ft.	165 ft.	225 ft.
Category I: Estuarine	150 ft. (no change based on habitat scores)			
Category II: Based on total score	75 ft.	105 ft.	165 ft.	225 ft.
Category III (all)	60 ft.	105 ft.	165 ft.	225 ft.
Category IV (all)	40 ft. (no change based on habitat scores)			

**Table 20.240.330(A)(2) Required Measures to Minimize Impacts to Wetlands**

**(Measures are required, where applicable to a specific proposal)**

<b>Disturbance</b>	<b>Activities and Uses That Cause Disturbances</b>	<b>Required Measures to Minimize Impacts</b>
Lights	<ul style="list-style-type: none"> <li>• Parking lots</li> <li>• Warehouses</li> <li>• Manufacturing</li> <li>• Residential</li> </ul>	<ul style="list-style-type: none"> <li>• Direct lights away from wetland.</li> </ul>
Noise	<ul style="list-style-type: none"> <li>• Manufacturing</li> <li>• Residential</li> </ul>	<ul style="list-style-type: none"> <li>• Locate activity that generates noise away from wetland.</li> <li>• If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source.</li> <li>• For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional 10-ft. heavily vegetated buffer strip immediately adjacent to the outer wetland buffer.</li> </ul>
Toxic runoff*	<ul style="list-style-type: none"> <li>• Parking lots</li> <li>• Roads</li> <li>• Manufacturing</li> <li>• Residential areas</li> <li>• Application of agricultural pesticides</li> <li>• Landscaping</li> </ul>	<ul style="list-style-type: none"> <li>• Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered.</li> <li>• Establish covenants limiting use of pesticides and fertilizers within 150 ft. of wetland.</li> <li>• Apply integrated pest management.</li> </ul>
Stormwater runoff	<ul style="list-style-type: none"> <li>• Parking lots</li> <li>• Roads</li> <li>• Manufacturing</li> <li>• Residential areas</li> <li>• Commercial</li> <li>• Landscaping</li> </ul>	<ul style="list-style-type: none"> <li>• Retrofit stormwater detention and treatment for roads and existing adjacent development.</li> <li>• Prevent channelized flow from lawns that directly enters the buffer.</li> <li>• Use low intensity development techniques (per PSAT publication on LID techniques).</li> </ul>
Change in water regime	<ul style="list-style-type: none"> <li>• Impermeable surfaces</li> </ul>	<ul style="list-style-type: none"> <li>• Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces</li> </ul>

	<ul style="list-style-type: none"> <li>• Lawns</li> <li>• Tilling</li> </ul>	and new lawns.
Pets and human disturbance	<ul style="list-style-type: none"> <li>• Residential areas</li> </ul>	<ul style="list-style-type: none"> <li>• Use privacy fencing or plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion.</li> <li>• Place wetland and its buffer in a separate tract or protect with a conservation easement.</li> </ul>
Dust	<ul style="list-style-type: none"> <li>• Tilled fields</li> </ul>	<ul style="list-style-type: none"> <li>• Use best management practices to control dust.</li> </ul>
Disruption of corridors or connections	-	<ul style="list-style-type: none"> <li>• Maintain connections to off-site areas that are undisturbed.</li> <li>• Restore corridors.</li> </ul>
<p>* These examples are not necessarily adequate for minimizing toxic runoff if threatened or endangered species are present at the site. Additional mitigation measures may be required based on recommendation of a qualified professional, third party review, or State agency recommendations.</p>		

4. **Increased Wetland Buffer Area Width.** Buffer widths shall be increased, on a case-by-case basis as determined by the Director, when a larger buffer is necessary to protect the shoreline ecological functions provided by the wetland's functions and values. This determination shall be supported by a critical area report, prepared by a qualified professional at the applicant's expense, showing that it is reasonably related to protection of the functions and values of the wetland and the shoreline. The critical area report shall include, but not be limited to, the following criteria:

- a. The wetland is used by a plant or animal species listed by the Federal government or the State as endangered, threatened, candidate, sensitive, monitored, or documented priority species or habitats, or the wetland is essential or outstanding habitat for those species or has unusual nesting or resting sites such as heron rookeries or raptor nesting trees; or
- b. The adjacent land has slopes greater than 15 percent and is susceptible to severe erosion, and erosion-control measures will not effectively prevent adverse wetland impacts; or
- c. The adjacent land has minimal vegetative cover. In lieu of increasing the buffer width where existing buffer vegetation is inadequate to protect the wetland functions and values, development and implementation of a wetland buffer restoration/enhancement plan in accordance with SMC [20.240.350](#) may be substituted.

5. Buffer averaging to improve wetland functions and values may be permitted when all of the following

conditions are met:

- a. The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or is a “dual-rated” wetland with a Category I area adjacent to a lower rated area;
- b. The buffer is increased adjacent to the higher functioning area of habitat or more sensitive portion of the wetland and decreased adjacent to the lower functioning or less sensitive portion as demonstrated by a critical areas report from a qualified wetland professional;
- c. The total area of the buffer after averaging is equal to the area required without averaging; and
- d. The buffer width is not reduced by more than 25 percent in any location.

6. Buffer averaging may be permitted when all of the following are met:

- a. There are no feasible alternatives to the site design that could be accomplished without buffer averaging;
- b. The averaged buffer will not result in degradation of the wetland’s functions and values as demonstrated by a critical areas report from a qualified wetland professional;
- c. The total buffer area after averaging is equal to the area required without averaging; and
- d. The buffer at its narrowest point is never less than either three-fourths of the required width or 75 feet for Category I and II, 50 feet for Category III, and 25 feet for Category IV, whichever is greater.

**B. Measurement of Wetland Buffers.** All buffers shall be measured perpendicular from the wetland boundary as surveyed in the field. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland.

**C. Buffers on Mitigation Sites.** All mitigation sites shall have buffers consistent with the buffer requirements of this chapter. Buffers shall be based on the expected or target category of the proposed wetland mitigation site.

**D. Buffer Maintenance.** Except as otherwise specified or allowed in accordance with this chapter, wetland buffers shall be retained in an undisturbed or enhanced condition. In the case of compensatory mitigation sites, removal of invasive nonnative weeds is required for the duration of the required monitoring period.

**E. Impacts to Buffers.** Requirements for the compensation for impacts to buffers are outlined in SMC [20.240.350](#).

**F. Overlapping Critical Area Buffers.** If buffers for two contiguous critical areas overlap (such as buffers for



a stream and a wetland), the wider buffer applies.

G. **Allowed Wetland Buffer Uses.** The following uses may be allowed within a wetland buffer in accordance with the review procedures of this chapter, provided such uses are not prohibited by any other applicable law and such uses are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland:

1. **Conservation and Restoration Activities.** Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.
2. **Passive Recreation.** Passive recreation facilities designed and in accordance with an approved critical area report, including:
  - a. Walkways and trails; provided, that those pathways are limited to minor crossings having no adverse impact on water quality. Pathways should be generally parallel to the perimeter of the wetland, located only in the outer 25 percent of the wetland buffer area, and located to avoid removal of significant trees. Pathways should be limited to pervious surfaces no more than five feet in width for pedestrian use only. Raised boardwalks utilizing nontreated pilings may be acceptable;
  - b. Wildlife viewing structures.
3. Educational and scientific research activities.
4. Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way; provided, that the maintenance or repair does not increase the footprint or use of the facility or right-of-way.
5. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops, and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.
6. Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary; provided, that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column is disturbed.
7. Enhancement of a wetland through the select removal of nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand labor and handheld equipment unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. Not more than 1,500 square feet of area may be cleared, as calculated cumulatively over one year, on private property without a permit. All removed plant material shall be taken away from the site and disposed of appropriately. Plants that appear on the Washington State Noxious Weed Control Board list of noxious

weeds or the King County Noxious Weed List shall be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.

8. **Stormwater Management Facilities.** Stormwater management facilities are limited to stormwater dispersion outfalls, bioswales, and other low impact facilities consistent with the adopted stormwater manual. Stormwater management facilities are not allowed in buffers of Category I or II wetlands. Facilities may be allowed within the outer 25 percent of the buffer of Category III or IV wetlands only; provided, that:

- a. No other location is feasible; and
- b. The location of such facilities will not degrade the functions or values of the wetland.

9. **Nonconforming Uses or Structures.** Repair and maintenance of nonconforming uses or structures, where legally established within the buffer, provided such uses or structures do not increase the degree of nonconformity, consistent with SMC [20.220.150](#).

10. **Development Proposals within Physically Separated and Functionally Isolated Wetland Buffers.** Consistent with the definition of “buffers” (SMC 20.20.012), areas that are functionally isolated and physically separated from wetland due to existing, legally established roadways, paved trails eight feet or more in width, or other legally established structures or paved areas eight feet or more in width that occur between the area in question and the wetland shall be considered physically isolated and functionally separated wetland buffers. Once determined by the Director, based on a submitted critical area report to be a physically separated and functionally isolated wetland buffer, development proposals shall be allowed in these areas.

#### H. **Signs and Fencing of Wetlands and Buffers.**

1. **Temporary Markers.** The outer perimeter of the wetland buffer and the clearing limits identified by an approved permit or authorization shall be marked in the field with temporary “clearing limits” fencing in such a way as to ensure that no unauthorized intrusion will occur. The marking is subject to inspection by the Director prior to the commencement of permitted activities during the preconstruction meeting required under SMC 20.50.330(E). This temporary marking and fencing shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

2. **Permanent Signs.** As a condition of any permit or authorization issued pursuant to this chapter, the Director may require the applicant to install permanent signs along the boundary of a wetland or buffer, when recommended in a critical area report or otherwise required by the provisions of this chapter.

- a. Permanent signs shall be made of an enamel-coated metal face and attached to a metal post or another nontreated material of equal durability. Signs shall be posted at an interval of one per lot or every 50 feet, whichever is less, and shall be maintained by the property owner in perpetuity. The

signs shall be worded consistent with the text specified in SMC [20.240.110](#) or with alternative language approved by the Director.

b. The provisions of subsection (H)(2)(a) of this section may be modified as necessary to assure protection of sensitive features.

3. **Fencing.** Fencing installed as part of a proposed activity or as required in this subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes impacts to the wetland and associated habitat. Permanent fencing shall be required at the outer edge of the critical area buffer under the following circumstances; provided, that the Director may waive this requirement:

a. As part of any development proposal for subdivisions, short plats, multifamily, mixed use, and commercial development where the Director determines that such fencing is necessary to protect the functions of the critical area; provided, that breaks in permanent fencing may be allowed for access to permitted buffer uses (subsection G of this section);

b. As part of development proposals for parks where the adjacent proposed use is active recreation and the Director determines that such fencing is necessary to protect the functions of the critical area;

c. When buffer averaging is part of a development proposal;

d. At the Director's discretion to protect the values and functions of a critical area as demonstrated in a critical area report. If found to be necessary, the Director shall condition any permit or authorization issued pursuant to this chapter to require the applicant to install a permanent fence at the edge of the habitat conservation area or buffer, when fencing will prevent future impacts to the habitat conservation area; or

e. The applicant shall be required to install a permanent fence around the wetland buffer when domestic grazing animals, only as allowed under SMC 20.40.240, are present or may be introduced on site. (Ord. 856 § 2 (Exh. B), 2019).

#### **20.240.340 Wetlands – Critical area report requirements.**

A. **Report Required.** If the Director determines that the site of a proposed development includes, is likely to include, or is adjacent to a wetland, a wetland critical area report shall be required. Critical area report requirements for wetland areas are generally met through submission to the Director of one or more wetland critical area reports. In addition to the general critical area report requirements of SMC [20.240.080](#), critical area reports for wetlands shall meet the requirements of this section. Critical area reports for two or more types of critical areas shall meet the report requirements for each relevant type of critical area.

B. **Preparation by a Qualified Professional.** Critical area reports for wetlands shall be prepared and signed by a qualified professional who is a certified wetland scientist or a noncertified wetland scientist with the

minimum required experience, per SMC 20.20.042, in the field of wetland science and with experience preparing wetland delineation, impact assessments, and mitigation plans.

C. **Third Party Review Required.** Critical areas studies and reports on wetland areas shall be subject to third party review consistent with SMC [20.240.080](#)(C) and in any of the additional following circumstances:

1. Compensatory mitigation is required for impacts to Category I, II, or III wetlands and or buffers; or
2. Compensatory mitigation is required for impacts to Category IV wetlands.

D. **Minimum Report Contents for Wetlands.** The written critical area report(s) and accompanying plan sheet(s) shall contain the following information, at a minimum:

1. The minimum report contents required per SMC [20.240.080](#)(E);
2. Documentation of any fieldwork performed on the site, including field data sheets for delineations, rating system forms, baseline hydrologic data, site photos, etc.;
3. A description of the methodologies used to conduct the wetland delineations, ratings, or impact analyses including references;
4. **Site Plans.** A copy of the site plan sheet(s) for the project shall be included with the written report and shall include, at a minimum:
  - a. Maps (to scale) depicting delineated and surveyed wetland(s) and required buffers on site, including buffers for off-site critical areas that extend onto the project site; the development proposal; other critical areas; clearing and grading limits; areas of proposed impacts to wetlands and/or buffers (include square footage estimates); and
  - b. A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into the buffers of any critical areas. The written report shall contain a discussion of the potential impacts to the wetland(s) associated with anticipated hydroperiod alterations from the project;
5. For each wetland identified on site and off site within 300 feet of the project site provide: the wetland rating, including a description of and score for each function, per wetland ratings (SMC [20.240.320](#)(B)); required buffers (SMC [20.240.330](#)); hydrogeomorphic classification; wetland acreage based on a professional survey from the field delineation (acreages for on-site portion and entire wetland area including off-site portions); Cowardin classification of vegetation communities; habitat elements; soil conditions based on site assessment and/or soil survey information; and to the extent possible, hydrologic information such as location and condition of inlet/outlets (if inlets/outlets can be legally accessed), estimated water depths within the wetland, and estimated hydroperiod patterns based on visual cues (e.g., algal mats, drift

lines, flood debris, etc.). Provide acreage estimates, classifications, and ratings based on entire wetland complexes, not only the portion present on the proposed project site;

6. A description of the proposed actions, including an estimation of acreages of impacts to wetlands and buffers based on the field delineation and survey and an analysis of site development alternatives, including a no-development alternative;
7. An assessment of the probable cumulative impacts to the wetlands and buffers resulting from the proposed development;
8. A description of reasonable efforts made to apply mitigation sequencing pursuant to SMC [20.240.053\(A\)](#) to avoid, minimize, and mitigate impacts to critical areas and a discussion of measures, including avoidance, minimization, and compensation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land-use activity;
9. A conservation strategy for habitat and native vegetation that addresses methods to protect and enhance on-site habitat and wetland functions; and
10. An evaluation of the functions of the wetland and adjacent buffer. Include reference for the method used and data sheets.

E. **Additional Information.** When appropriate due to the proposed impacts or the project area conditions, the Director may also require the critical area report to include:

1. Where impacts are proposed, mitigation plans consistent with the requirements of SMC [20.240.082](#) and the wetland mitigation performance standards and requirements of SMC [20.240.350](#);
2. A request for consultation with WDFW, the Department of Ecology, local Native American Indian tribes, and/or other appropriate agency;
3. Copies of the joint aquatic resource permit application (JARPA) and related approvals, such as a hydraulic project approval (HPA) from the DFW, when applicable to the project; and
4. Detailed surface and subsurface hydrologic features both on and adjacent to the site. (Ord. 856 § 2 (Exh. B), 2019).

#### **20.240.350 Wetlands – Compensatory mitigation performance standards and requirements.**

##### **A. Requirements for Compensatory Mitigation.**

1. Compensatory mitigation for alterations to wetlands shall be used only for impacts that cannot be avoided or minimized and shall achieve equivalent or greater shoreline ecological and biologic functions. Compensatory mitigation plans shall be consistent with Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Department of Ecology Publication No. 06-06-011b, March 2006,

or as revised).

2. Mitigation ratios shall be consistent with subsection E of this section.
3. Mitigation requirements may also be determined using the credit/debit tool described in “Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington: Operational Draft” (Department of Ecology Publication No. 10-06-011, February 2011, or as revised) consistent with subsection E of this section.

**B. Compensating for Lost or Impacted Functions.** Compensatory mitigation shall address the shoreline ecological functions and the wetland or wetland buffer functions and values affected by the proposed project, with an intention to achieve functional equivalency or improvement of functions and values. The goal shall be for the compensatory mitigation to provide similar shoreline ecological functions and wetland functions and values as those lost, except when either:

1. The lost wetland provides minimal functions and values, and the proposed compensatory mitigation action(s) will provide equal or greater functions and values or will provide functions and values shown to be limiting within a watershed through a formal Washington State watershed assessment plan or protocol; or
2. Out-of-kind replacement of wetland type or functions and values will best meet watershed goals formally identified by the City, such as replacement of historically diminished wetland types.

**C. Preference of Mitigation Actions.** Methods to achieve compensation for wetland functions and values shall be approached in the following order of preference:

1. **Restoration.** Restoration of wetlands.
2. **Creation.** Creation (establishment) of wetlands on disturbed upland sites, such as those with vegetative cover consisting primarily of nonnative species. This should be attempted only when there is an adequate source of water and it can be shown that the surface and subsurface hydrologic regime is conducive to the wetland community that is anticipated in the design.
3. **Enhancement.** Enhancement of significantly degraded wetlands in combination with restoration or creation. Enhancement alone will result in a loss of wetland acreage and is less effective at replacing the functions and values lost. Enhancement should be part of a mitigation package that includes replacing the impacted area and meeting appropriate ratio requirements.
4. **Preservation.** Preservation of high-quality, at-risk wetlands as compensation is generally acceptable when done in combination with restoration, creation, or enhancement; provided, that a minimum of 1:1 acreage replacement is provided by reestablishment or creation. Preservation of high-quality, at-risk wetlands and habitat may be considered as the sole means of compensation for wetland impacts when the following criteria are met:

- a. Wetland impacts will not have a significant adverse impact on habitat for listed fish, or other ESA-listed species;
- b. There is no net loss of habitat functions within the watershed or basin;
- c. Mitigation ratios for preservation as the sole means of mitigation shall generally start at 20:1. Specific ratios should depend upon the significance of the preservation project and the quality of the wetland resources lost;
- d. The impact area is small (generally less than one-half acre) and/or impacts are occurring to a low-functioning system (Category III or IV wetland); and
- e. All preservation sites shall include buffer areas adequate to protect the habitat and its functions from encroachment and degradation.

**D. Type and Location of Compensatory Mitigation.** Unless it is demonstrated that a higher level of ecological functioning would result from an alternative approach, compensatory mitigation for ecological functions shall be either in kind and on site, or in kind and within the same stream reach, sub-basin, or drift cell (if estuarine wetlands are impacted). Compensatory mitigation actions shall be conducted within the same sub-drainage basin and on the site of the alteration, except when all of the following apply:

- 1. There are no reasonable opportunities on site or within the sub-drainage basin (e.g., on-site options would require elimination of high-functioning upland habitat), or opportunities on site or within the sub-drainage basin do not have a high likelihood of success based on a determination of the capacity of the site to compensate for the impacts. Considerations should include:
  - a. Anticipated replacement ratios for wetland mitigation;
  - b. Buffer conditions and proposed widths;
  - c. Available water to maintain anticipated hydrogeomorphic classes of wetlands when restored; and
  - d. Proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);
- 2. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland;
- 3. Off-site locations shall be in the same sub-drainage basin, unless watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the City and strongly justify location of mitigation at another site; and

4. The design for the compensatory mitigation project needs to be appropriate for its location (i.e., position in the landscape). Therefore, compensatory mitigation should not result in the creation, restoration, or enhancement of an atypical wetland. An atypical wetland refers to a compensation wetland (e.g., created or enhanced) that does not match the type of existing wetland that would be found in the geomorphic setting of the site (i.e., the water source(s) and hydroperiod proposed for the mitigation site are not typical for the geomorphic setting). Likewise, it should not provide exaggerated morphology or require a berm or other engineered structures to hold back water. For example, excavating a permanently inundated pond in an existing, seasonally saturated or inundated wetland is one example of an enhancement project that could result in an atypical wetland. Another example would be excavating depressions in an existing wetland on a slope, which would require the construction of berms to hold the water.

**E. Wetland Mitigation Ratios<sup>1</sup>.**

**Table 20.240.350(G). Wetland mitigation ratios apply when impacts to wetlands cannot be avoided or are otherwise allowed consistent with the provisions of this chapter.**

<b>Category and Type of Wetland<sup>2</sup></b>	<b>Creation or Reestablishment (Area – in square feet)</b>	<b>Rehabilitation (Area – in square feet)</b>	<b>Enhancement (Area – in square feet)</b>
Category I: Based on total score for functions	4:1	8:1	16:1
Category I: Mature forested	6:1	12:1	24:1
Category I: Estuarine	Case-by-case	6:1	Case-by-case
Category II: Based on total score for functions	3:1	6:1	12:1
Category III (all)	2:1	4:1	8:1
Category IV (all)	1.5:1	3:1	6:1
<sup>1</sup> Ratios for rehabilitation and enhancement may be reduced when combined with 1:1 replacement through creation or reestablishment. See Table 1a or 1b, Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance –			



Version 1 (Department of Ecology Publication No. 06-06-011a, March 2006, or as revised).

<sup>2</sup> Category and rating of wetland as determined consistent with SMC [20.240.320](#)(B).

F. **Buffer Mitigation Ratios.** Impacts to buffers shall be mitigated at a 1:1 ratio. Compensatory buffer mitigation shall replace those buffer functions lost from development.

G. **Mitigation Performance Standards.** The performance standards in this section shall be incorporated into mitigation plans submitted to the City for impacts to wetlands. The following performance standards shall apply to any mitigations proposed within Category I, II, III and IV wetlands and their buffers. Modifications to these performance standards consistent with the guidance in Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Department of Ecology Publication No. 06-06-011b, March 2006, or as revised) may be considered for approval by the Director as alternatives to the following standards:

1. Plants indigenous to the region (not introduced or foreign species) shall be used.
2. Plant selection shall be consistent with the existing or projected hydrologic regime, including base water levels and stormwater event fluctuations.
3. Plants should be commercially available or available from local sources.
4. Plant species high in food and cover value for fish and wildlife shall be used.
5. Mostly perennial species should be planted.
6. Committing significant areas of the site to species that have questionable potential for successful establishment shall be avoided.
7. Plant selection shall be approved by a qualified professional.
8. The following standards shall apply to wetland design and construction:
  - a. Water depth shall not exceed six and one-half feet (two meters).
  - b. The grade or slope that water flows through the wetland shall not exceed six percent.
  - c. Slopes within the wetland basin and the buffer zone shall not be steeper than 3:1 (horizontal to vertical).
  - d. The wetland (excluding the buffer area) should not contain more than 60 percent open water as measured at the seasonal high water mark.

9. Substrate should consist of a minimum of one foot, in depth, of clean (uncontaminated with chemicals or solid/hazardous wastes) inorganic/organic materials.
10. Planting densities and placement of plants should be determined by a qualified professional and shown on the design plans.
11. The planting plan shall be approved by the City.
12. Stockpiling soil and construction materials should be confined to upland areas and contract specifications should limit stockpiling of earthen materials to durations in accordance with City clearing and grading standards, unless otherwise approved by the City.
13. Planting instructions shall be submitted that describe placement, diversity, and spacing of seeds, tubers, bulbs, rhizomes, sprigs, plugs, and transplanted stock.
14. Controlled release fertilizer shall be applied (if required) at the time of planting and afterward only as plant conditions warrant as determined during the monitoring process.
15. An irrigation system shall be installed, if necessary, for the initial establishment period.
16. All construction specifications and methods shall be approved by a qualified professional and the City.
17. Construction management shall be provided by a qualified professional. Ongoing work on site shall be inspected by the City.

H. **Compensatory Mitigation Plan.** When a project involves wetland and/or buffer impacts, a compensatory mitigation plan shall be included as part of the required critical area report. Compensatory wetland mitigation plans shall meet the minimum requirements of SMC [20.240.082](#) and demonstrate compliance with SMC [20.240.053](#). Full guidance can be found in Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Department of Ecology Publication No. 06-06-011b, March 2006, or as revised). The mitigation plan shall meet the following additional standards:

1. Description of the existing wetland and buffer areas proposed to be impacted. Include acreage (or square footage), water regime, vegetation, soils, landscape position, surrounding land uses, and functions. Also describe impacts in terms of acreage by Cowardin classification, hydrogeomorphic classification, and wetland rating, based on wetland ratings (SMC [20.240.320\(B\)](#));
2. Description of the compensatory mitigation site, including location and rationale for selection. Include an assessment of existing conditions: acreage (or square footage) of wetlands and uplands, water regime, sources of water, vegetation, soils, landscape position, surrounding land uses, and functions. Estimate future conditions in this location if the compensation actions are not undertaken (i.e., how would this site

progress through natural succession);

3. A description of the proposed actions for compensation of wetland and upland areas affected by the project. Include overall goals of the proposed mitigation, including a description of the targeted functions, hydrogeomorphic classification, and categories of wetlands;
4. A description of the proposed mitigation construction activities, construction/installation notes, and timing of activities;
5. A discussion of ongoing management practices that will protect wetlands after the project site has been developed, including proposed monitoring and maintenance programs (for remaining wetlands and compensatory mitigation wetlands);
6. Proof of establishment of notice on title for the wetlands and buffers on the project site, including the compensatory mitigation areas; and
7. The scaled plan sheets for the compensatory mitigation shall contain, at a minimum:
  - a. Surveyed edges of the existing wetland and buffers, proposed areas of wetland and/or buffer impacts, location of proposed wetland, and/or buffer compensation actions;
  - b. Existing topography, ground proofed, at two-foot contour intervals in the zone of the proposed compensation actions if any grading activity is proposed to create the compensation area(s). Also existing cross-sections of on-site wetland areas that are proposed to be impacted and cross-section(s) (estimated one-foot intervals) for the proposed areas of wetland or buffer compensation;
  - c. Surface and subsurface hydrologic conditions, including an analysis of existing and proposed hydrologic regimes for enhanced, created, or restored compensatory mitigation areas. Also, illustrations of how data for existing hydrologic conditions were used to determine the estimates of future hydrologic conditions;
  - d. Conditions expected from the proposed actions on site, including future hydrogeomorphic types, vegetation community types by dominant species (wetland and upland), and future water regimes;
  - e. Required wetland buffers for existing wetlands and proposed compensation areas. Also, identify any zones where buffers are proposed to be reduced or enlarged outside of the standards identified in this chapter;
  - f. A plant schedule for the compensation area, including all species by proposed community type and water regime, size and type of plant material to be installed, spacing of plants, typical clustering patterns, typical plant installation details and notes, total number of each species by community type, and timing of installation; and

- g. Performance standards (measurable standards reflective of years post-installation) for upland and wetland communities, monitoring plan, contingency plan, maintenance schedule, and actions. Standards for success shall be established based on the performance standards identified and the functions and values being mitigated based on the guidance in Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Department of Ecology Publication No. 06-06-011b, March 2006, or as revised). (Ord. 856 § 2 (Exh. B), 2019).

## **Subchapter 5.**

### **Shoreline Flood Hazard Areas**

#### **20.240.360 Floodplain management.**

The following policies and regulations must be factored into decisions regarding all flood management planning and development within that portion of the 100-year floodplain that falls within Shoreline's shoreline jurisdiction (within 200 feet of OHWM).

Floodplain management involves actions taken with the primary purpose of preventing or mitigating damage due to flooding. Floodplain management can involve planning and zoning to control development, either to reduce risks to human life and property, or to prevent development from contributing to the severity of flooding. Floodplain management can also address the design of developments to reduce flood damage and the construction of flood controls, such as dikes, dams, engineered floodways, and bioengineering.

#### **A. Policy.**

1. Flood management planning should be undertaken in a coordinated manner among affected property owners and public agencies and should consider the entire coastal system. This planning should consider off-site impacts such as erosion, accretion, and/or flood damage that might occur if shore protection structures are constructed.
2. Nonstructural control solutions are preferred over structural flood control devices, and should be used wherever possible when control devices are needed. Nonstructural controls include such actions as prohibiting or limiting development in areas that are historically flooded or limiting increases in peak flow runoff from new upland development. Structural solutions to reduce shoreline damage should be allowed only after it is demonstrated that nonstructural solutions would not be able to reduce the damage.
3. Substantial stream channel modification, realignment, and straightening should be discouraged as a means of flood protection.
4. Where possible, public access should be integrated into the design of publicly financed flood management facilities. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.370 Flood hazard – Description and purpose.**

- A. A flood hazard area consists of the special flood hazard areas and protected areas as defined in Chapter 13.12 SMC, Floodplain Management, which comprise the regulatory floodplain.
- B. It is the purpose of Chapter 13.12 SMC regulations to ensure that the City meets the requirements of the National Flood Insurance Program and maintains the City as an eligible community for Federal flood insurance benefits. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.380 Flood hazard – Development limitations.**

Development occurring within the 100-year floodplain designations of the current Federal Emergency Management Agency (FEMA) flood insurance rate map (FIRM) for King County as identified in SMC 13.12.300, which is also located in the shoreline jurisdiction, shall be subject to the regulatory and permit authorities of both this Master Program and Chapter 13.12 SMC. (Ord. 856 § 2 (Exh. B), 2019).

**Subchapter 6.****Aquifer Recharge Areas****20.240.420 Aquifer recharge – Description and purpose.**

- A. Aquifer recharge areas consist of areas that provide a source of potable water and contribute to stream discharge during periods of low flow, as defined in Chapter 20.20 SMC.
- B. The primary purpose of aquifer recharge area regulations is to protect aquifer recharge areas by providing for regulation of land use activities that pose a risk of potential aquifer contamination and to minimize impacts through the application of strict performance standards. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.430 Aquifer recharge – Designation and classification.**

- A. Aquifer recharge areas shall be designated and classified based on the soil and ground water conditions and risks to surface water during periods of low hydrology. Classification depends on the combined effects of hydrogeological susceptibility to contamination and contaminant loading potential, and includes upland areas underlain by soils consisting largely of silt, clay or glacial till, upland areas underlain by soils consisting largely of sand and gravel, wellhead protection areas, and areas underlain by soils consisting largely of sand and gravel in which there is a predominantly downward or lateral component to ground water flow.
- B. At the time of adoption of the amendments to the critical areas of this Master Program, through Ordinance No. 856, there were no identified critical aquifer recharge areas within the city. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.440 Aquifer recharge – Alteration.**

Subject to the required permits, the following land uses and activities shall require implementation of best management practices (BMPs) as established by the Department of Ecology:

- A. Land uses and activities that involve the use, storage, transport, or disposal of significant quantities of chemicals, substances, or materials that are toxic, dangerous, or hazardous, as those terms are defined by State and Federal regulations;
- B. On-site community sewage disposal systems;
- C. Underground storage of chemicals;
- D. Petroleum pipelines;
- E. Solid waste landfills; and/or
- F. Stormwater management, including infiltration, and ground water recharge. (Ord. 856 § 2 (Exh. B), 2019).

**20.240.450 Aquifer recharge – Performance standards and requirements.**

Any uses or activities that seek to be located in an aquifer recharge area, as defined within this subchapter, which involve the use, storage, transport, or disposal of significant quantities of chemicals, substances, or materials that are toxic, dangerous, or hazardous, as those terms are defined by State and Federal regulations, shall comply with the following additional standards:

- A. Underground storage of chemicals, substances or materials that are toxic, hazardous, or dangerous is discouraged.
- B. Any chemicals, substances or materials that are toxic, hazardous, or dangerous shall be segregated and stored in receptacles or containers that meet State and Federal standards.
- C. Storage containers shall be located in a designated, secured area that is paved and able to contain leaks and spills, and shall be surrounded by a containment dike.
- D. Secondary containment devices shall be constructed around storage areas to retard the spread of any spills and a monitoring system should be implemented.
- E. A written operations plan shall be developed, including procedures for loading/unloading liquids and for training of employees in proper materials handling.
- F. An emergency response/spill clean-up plan shall be prepared and employees properly trained to react to accidental spills.
- G. Any aboveground storage tanks shall be located within a diked containment area on an impervious surface. The tanks shall include overfill protection systems and positive controls on outlets to prevent uncontrolled discharges.
- H. Development should be clustered and impervious surfaces limited where possible.

- I. No waste liquids or chemicals of any kind shall be discharged to storm sewers.
- J. All development shall implement best management practices (BMPs) for water quality, as approved by the City, including the standards contained within the adopted stormwater manual, such as biofiltration swales and use of oil-water separators, and BMPs appropriate to the particular use proposed. (Ord. 856 § 2 (Exh. B), 2019).